SOCHARA - School of Public Health, Equity and Action (SOPHEA)

Master in Public Health- Community Health (MPH-CH)

Accredited by Martin Luther Christian University (MLCU), Shillong, Meghalaya

Community Health Changemakers Confluence (CHCC)

Monday, 8th December to Friday, 12th December, 2025

BACKGROUND / READING MATERIALS

SOCHARA
03-12-2025

sochara
building community health

ಸಮುದಾಯ ಆರೋಗ್ಯ ಜಾಗೃತಿ, ಸಂಶೋಧನೆ ಮತ್ತು ಕ್ರಿಯಾ ಸಂಸ್ಥೆ

Society for Community Health Awareness, Research and Action - SOCHARA

Registered under the Karnataka Societies Registration Act 17 of 1960, S.No. 44/91-92.

SOCHARA - School of Public Health, Equity and Action (SOPHEA)

Master in Public Health with specialisation in Community Health (MPH-CH)

Accredited by Martin Luther Christian University (MLCU), Shillong, Meghalaya

VISION AND EXPECTED LEARNING OUTCOMES

The MPH-CH builds on the community health approach that SOCHARA and other like-minded organisations have been working on for over four decades. This approach:

- builds on the societal paradigm of health and healthcare.
- explores alternative approaches to health and well-being which is rooted in the community context and dynamics.
- encourages community action on social determinants of health.
- enables communities, practitioners and researchers to find sustainable solutions to public health issues.

A community health approach builds on local capabilities, rational, safe and effective health traditions, culture and context in a responsive, affirmative as well as challenging manner.

The learning outcomes of the MPH-CH are to enable you:

- To be practitioners rooted in values of equity, rights, gender equality, ethics, integrity, quality, accountability and responsibility at all levels in community health and public health.
- To develop systems thinking, leadership, mentorship, ethical reasoning, problem-solving and implementation skills.
- To develop skills in qualitative, quantitative and mixed methods research including epidemiology and biostatistics.
- To strengthen interpersonal and rapport building skills for engagement and partnership with communities, society and the state; across multiple sectors with a special focus on the public health system.
- To develop skills for engaging with and strengthening an evidence-based Indian public health system, plural healthcare (AYUSSH and others), health policy processes, and for building community capacity, monitoring, evaluation and health surveillance.

- To develop an understanding of public health priorities such as MCH, gender, disability, communicable and non-communicable diseases, epidemics and pandemics, climate change, disaster response, urban, rural and tribal health issues, emerging concepts such as one health and planetary health.
- To develop the ability and skills to understand the micro and macro social determinants of health, community contexts and develop community-based action plans to address identified public health issues.
- To inculcate an understanding of determinants of health, together with approaches and methodologies for health promotion (including prevention and protection) using a community health approach.
- To develop capacities to initiate/strengthen community health action, research, educational strategies, policy, dialogue and action.
- To develop an ability for life-long learning.

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Community Health Changemakers Confluence (CHCC)

Monday, 8th December to Friday, 12th December, 2025

CHCC Goals and Learning Objectives

Broad Goals

- To participate actively in a research proposal development workshop
- To further equip oneself with the necessary knowledge, skills, attitudes and values to become life-long learners through study, research, action, reflection as Community Health and Public Health practitioners.
- To revitalise one's commitment to working towards Health for All based on shared learning and life experiences of fellow travellers in Community Health and Public Health.
- To engage with a conversational methodology during the CHCC, actively sharing one's thoughts, and utilising the opportunity to deepen one's inner learning.

Learning objectives

1. Core Objectives:
    - To develop a community health-oriented research study proposal for scientific and ethical review. The research needs to be completed between November 2025 and July 2026.
    - To revisit and reflect on knowledge, skills, values and attitudes developed during the MPH-CH course and to explore what lies ahead.
    - To develop an understanding of research and publication ethics in community health research and action studies.
2. Secondary objectives:
    - To widen one's engagement in critical issues of current and future public health significance through discussion and debate.
    - To strengthen the sense of 'community' and 'life-long learning' among participants for the purpose of community health and public health.
    - To get to know each other better and to understand oneself through strengthening self-awareness and a practice of self-care.

PROVISIONAL AGENDA

04

DAY - 1 MONDAY 8th December 2025

Participant moderator: **To be assigned** Core team reporter: **Karun Puzhamudi**

Time	Session name	Facilitator	Venue
8.00 am to 8.45 am	**Breakfast**		At accommodation
9:15 am to 9.30 am	Registration	Maria, Precilla	Main Building, SOCHARA
9.30 am to 10.00 am	Welcome , introduction and setting context	Dr. Thelma Narayan, Director of Academics Ms. Prafulla S., Secretary-Coordinator SOCHARA.	Training Hall, SOCHARA
10.00 am to 10.30 am	Programme Agenda and Expected Outcomes	Dr. Thelma Narayan and Dr. Archana S	Training Hall, SOCHARA and Online via Zoom
10.30 am to 11.00 am	**Coffee / Tea Break**		SOCHARA premises
11.00 am to 1.00 pm	The SOCHARA Research story	**Ms. Janelle Fernandes** - CHAI Golden Jubilee Evaluation **Ms. Ranjitha L** - Mitanin & SHRC Evaluation **Dr. Ravi D'Souza** - Odisha Health Policy & Health System Reform	Training Hall, SOCHARA
1.00 pm to 2.00 pm	**Lunch**		SOCHARA premises
2:00 pm to 3:30p.m	Participants' Research and life story	Participants	Training Hall, SOCHARA
3.30 pm to 3:45pm	**Coffee / Tea Break**		SOCHARA premises
3:45 pm to 5:00 pm	Open session - SOCHARA Team	SOCHARA team	Training Hall, SOCHARA
5:00pm to 5:30 pm	Concluding Comments and Announcements	SOPHEA team	Training Hall, SOCHARA

DAY 2 - TUESDAY 9th December 2025

Participant moderator: Core team reporter: **Ranjitha L**

Time	Session name	Facilitator	Venue
8.00 am to 8.45 am	**Breakfast**		At accommodation
9.15 am to 10.20 am	Discussion of participants' research topics	Dr Thelma Narayan and Ms. Janelle Fernandes	Training Hall, SOCHARA
10:30 am to 11:30a.m	Literature review workshop (participants to come with their individual literature reviews and Q&As)	SOPHEA team	Training Hall, SOCHARA
11.30 am to 11.45 am	**Coffee / Tea Break**		SOCHARA premises
11:45 am to 12.30 pm	Research story and challenges	**Dr. Upendra Bhojani, IPH, Bengaluru**	Training Hall, SOCHARA
12:30 pm to 1:00 pm	Alumni MPH-CH Research Journey	**Dr Nilesh Mohite**	Online via Zoom
1.00 pm to 2.00 pm	**Lunch**		SOCHARA premises
2.00 pm to 3:15pm	Developing a study research question and rationale Workshop: Formulate a Research question	**Dr. Upendra Bhojani, IPH, Bengaluru and SOPHEA team**	Training Hall, SOCHARA
3.15 pm to 3.30pm	**Coffee / Tea Break**		SOCHARA premises
3:30 to 5:00 p.m	Workshop: Literature review: keywords and structure Develop research objectives	Dr Hemanth, Janelle, Karun, Ranjitha, **Dr Ravi D'Souza** and participants	Training Hall, SOCHARA

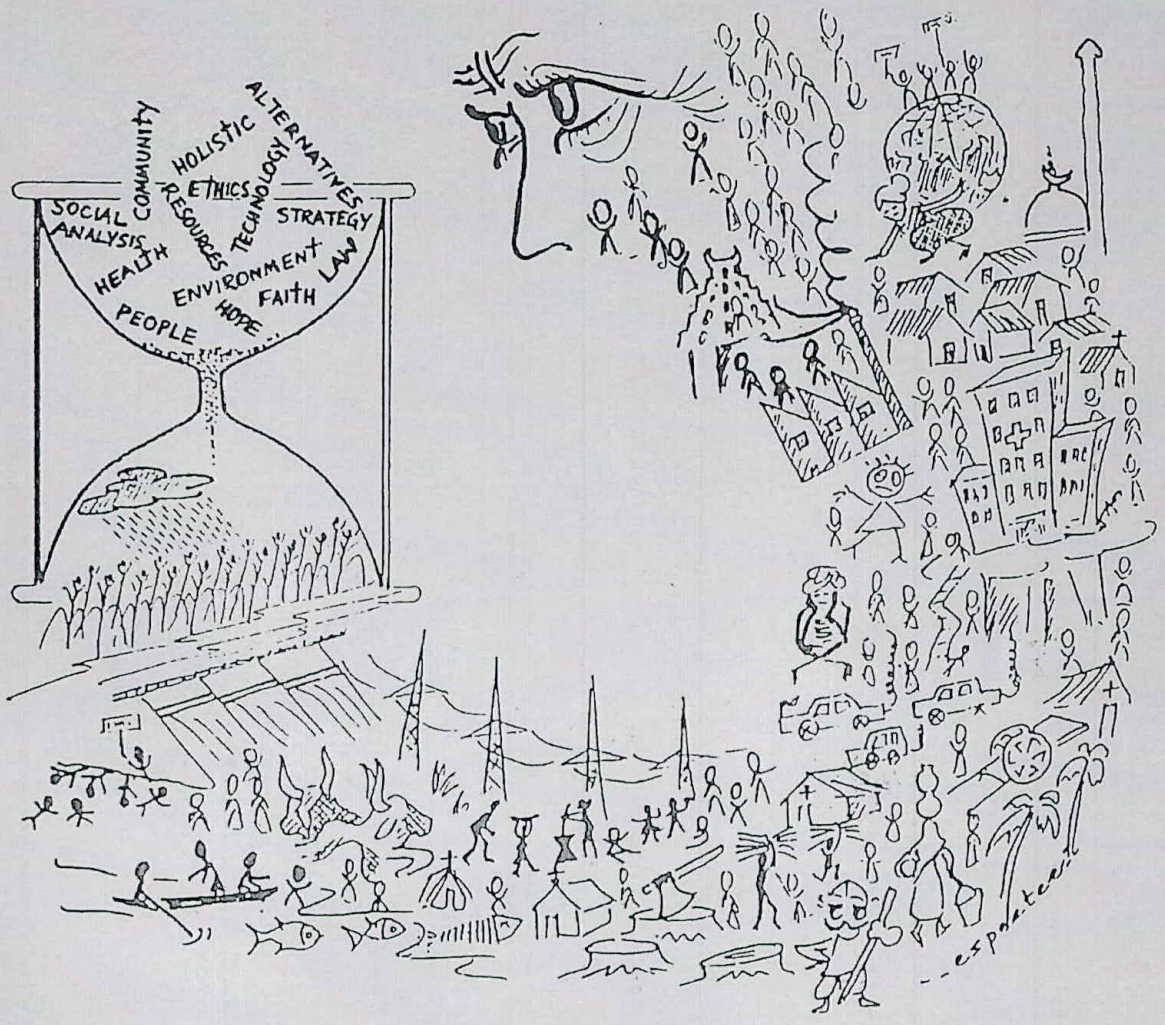
DAY 3 - WEDNESDAY 10th December 2025 Participant moderator: Core team reporter:			
Time	**Session name**	**Facilitator**	**Venue**
8.00 am to 8.45 am	**Breakfast**		At accommodation
9:15 am to 9:30 am	Recap	Ms. Janelle Fernandes	Training Hall, SOCHARA
9.30 am to 11:00 am	Quantitative research	Dr. Archana S (SOPHEA team member)	Training Hall, SOCHARA
11.15 am to 11.30 am	**Coffee / Tea Break**		SOCHARA premises
11.30 am to 1.00 pm	Quantitative research	**Dr. Rahul ASGR**	Training Hall, SOCHARA
1.00 pm to 2.00 pm	**Lunch**		SOCHARA premises
2.00 pm to 3.15 pm	Identifying an appropriate research design for your research question Practical exercises of research methods – Quantitative	SOCHARA team	Training Hall, SOCHARA
3.15 pm to 3:30p.m	**Coffee / Tea Break**		SOCHARA premises
3.30 pm to 5:30pm	Further development and refining of Draft research proposal	SOPHEA team	Training Hall, SOCHARA
DAY - 4 THURSDAY 11th December 2025 Participant moderator: Core team reporter: **Janelle Fernandes**			
Time	**Session name**	**Facilitator**	**Venue**
8.00 am to 8.45 am	**Breakfast**		At accommodation
9:15am to 9:30a.m	Recap	TBC	Training Hall, SOCHARA
9.30 am to 11:00 am	Qualitative research	Dr. Shivanand Savatagi	Training Hall, SOCHARA
11.00 am to 11.15 am	**Tea break**		SOCHARA premises

11:15 am to 12:15 pm	Mixed methods	Dr Sushi Kadanakuppe	Training Hall, SOCHARA
12:15 pm to 1:00 pm	Highlighting key ethical considerations and dilemmas and examples of mitigation to keep in mind. Overview of SISEC application process with timeline	Dr. Manjulika Vaz and Ms Janelle Fernandes	Training Hall, SOCHARA
1.00 pm to 2.00 pm	**Lunch**		SOCHARA premises
02.00 pm to 3.15 pm	Idea draft presentation	All participants	Training Hall, SOCHARA
3.15 pm to 3.30pm	**Tea Break**		SOCHARA premises
03:45 pm to 5:00 pm	Idea draft presentation	All participants	Training Hall, SOCHARA
6:30 pm to 8:30 p.m	**Film show & Team Dinner**		
Participant moderator:	**DAY - 5 FRIDAY 12th December 2025** **Core team reporter:**		
8.00 am to 8.45am	**Breakfast**		At accommodation
8.45 am to 9:30 am	Open Session	All	Training Hall, SOCHARA
9.15 am to 9.45 am	Alumni Sharing	Mr. Shakti Singh Shekawat	Training Hall, SOCHARA
9:45 am to 10:45 am	Practical simulation of FGDs, In depth interview, participatory mapping	SOPHEA team	Training Hall, SOCHARA
11.00 am to 11.15 pm	**Coffee / Tea Break**		SOCHARA premises
11.15 am to 01.00 pm	Report writing	TBC	Training Hall, SOCHARA

1.00 pm to 2. 00 pm	**Lunch**		SOCHARA premises
2.00 pm to 3.00 pm	Journey as a Health Researcher	Dr. Denis Xavier, SOCHARA President and Health Researcher	Training Hall, SOCHARA
3:00 pm to 4:00 pm	Closing Remarks	All	Training Hall, SOCHARA
4.00 pm to 4.15 pm	**Tea Break**		SOCHARA premises
Evening	Tibetan Medicine, Compassionate healing and Meditation	Session with Dr Jampa Yonten	At Dr Jampa's office in Brigade Road

CPHE

Seeking the signs of the times

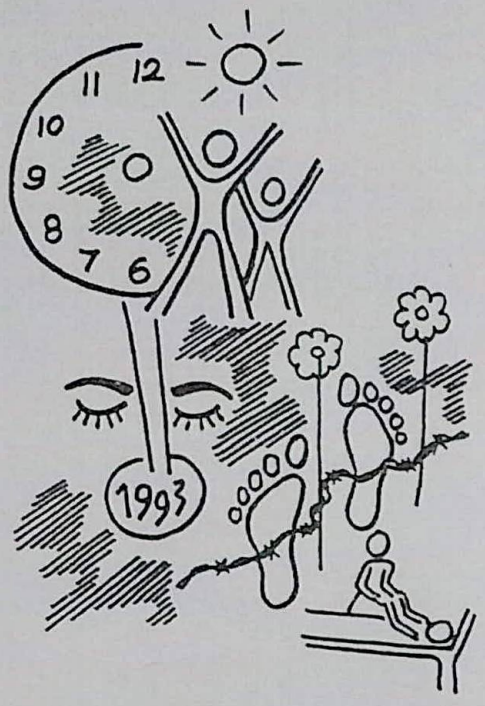


REFLECTIONS

HAI

1943 - 1993

CPHE



A TIME FOR EVERYTHING

'There is a time for everything'
goes the refrain of a popular tune,
And at CHAI's fiftieth year,
It is time to be glad and rejoice,
To raise hearts and minds
in thankfulness to God.

It is time also to reflect a while,
to seek the signs of the times,
to renew our vision and
commitment
and to look ahead.

The times too have changed, since inception,
for better and for worse,
Therefore, it is in the context of today,
and perhaps more importantly of tomorrow,
That each person, member, associate and friend
of CHAI, join together
in a common search towards
making health, and life in all its fullness,
more of a reality for people
particularly the marginalised and impoverished,
the sick, the least and the last,
who inhabit an ancient land,
rich in history, culture, ideas and expression,
and ever responsive in diverse ways,
to the call of the Deep.

Art work and animation by
Dr. Shirdi Prasad Tekur of CHC & Mr. Magimai Pragasan of CHAI

Support Team from Community Health Cell (CHC)
M. Kumar, M.S. Nagarajan, V. Nagaraja Rao, S. John, James

CPHE

The Catholic Hospital Association of India

POST BOX 2126, GUNROCK ENCLAVE, SECUNDERABAD-500 003.

SEEKING THE SIGNS OF THE TIME

(A word from the Executive Director)

Dear Friends,

At last with gratitude to God and a big thank-you to the Evaluation Study team, and to each one of you, I am happy to present to you this Discussion Document arising out of the CHAI Golden Jubilee Evaluation Study. As the study–team itself mentioned, this is not the report of the study. That would be a really voluminous one to be ready, soon. This is not a summary of the report, either. This is a discussion document for the use of our members during the Golden Jubilee Year for further reflection, comments and contribution towards a detailed plan of action to be ready at the time of the closing of our Golden Jubilee Year in November 1993.

However, since this document is arising out of the study, it contains all that is necessary for our discussions at various levels. Hence, there is enough matter for our discussions, and, to suggest concrete plan of action for, say, the coming ten years. By now you would have already received the copy of our re-printed book "Out of Nothing". Please read this book and the document, study them thoroughly and encourage others in your community/circle to read them. And then discuss.

These should be read with interest. Relish them. Then, you will understand their value and the taste. These will give you an idea of what CHAI was, what it is and what it should be in the coming years. Then, it is for you to suggest realistic and concrete plan of action. Then, it is for all of us, with the help of the Lord, to strive together, putting our heads, hearts and hands together to make health a reality to many more people in our country and may be even elsewhere, with particular reference to the poor and the poorest of the poor, thereby ensuring "fullness of life" to them. Through my subsequent circulars, we shall keep you informed about the various steps to be taken for discussions.

Those of you who were at this year's convention and the Golden Jubilee Year inauguration at Guntur, would have understood the sacrifices, hardwork and pain that went into the preparation of this document. And those of so many people, particularly the study-team under the dynamic and inspiring leadership of Dr Thelma Narayan. Then, of course, the members of the Advisory Committee and, specially Prof. P. Ramachandran and Dr. CM Francis. Then the money that was required—a big sum indeed—which was provided so generously by Cebemo, Holland.

The best way of showing our gratitude to all these, and above all, to our Lord and Master, would be by reading, studying thoroughly and using this document the way it was intended for, and as explained above and in the document itself, and thereby ensuring the fullness of life to our people by providing health for many more through CHAI during the coming years.

Fr John Vattamattom svd

Secunderabad
14-11-1992

SEEKING THE SIGNS OF THE TIMES

A Discussion Document for Study and Action arising out of the CHAI Golden Jubilee Evaluation Study

Study Team

Thelma Narayan, Johney Jacob, Tomy Philip.
Assisted by Xavier Anthony

Community Health Cell
Bangalore, October 1992

Advisory Committee to the Study

Dr. C.M.Francis (Chairman)
Prof. P.Ramachandran (Consultant)
Dr. Ravi Narayan
Mr. P.Srinivasan
Sr. Adriana Plackal,JMJ (CHAI Representative)
Fr. John Vattamattom,SVD (CHAI Representative)
Fr. Jose Melettukochiyil,CST (CHAI Representative)

IMPORTANT

This discussion document

- gives basic information about CHAI and its membership,
- some information about the wider context within which it functions, and
- some feedback from the field

It raises issues specific to the future role and functioning of CHAI, that need to be discussed by the membership in general.

The detailed report of the CHAI Golden Jubilee Evaluation Study will be ready after a few months.

This is not a summary of the Study report.

ACKNOWLEDGEMENTS

We have deep appreciation for the openness with which CHAI has embarked on this process of search. It is a sign of their seriousness that they allowed the searchlight to be focused on themselves, as well as on the external milieu. We have had complete freedom in planning the study and exploring any type of issues with the members. We also had complete access to all documents. The privilege of discussing a wide range of issues with the staff and associates was also ours. For all this we are grateful. It has been an extremely enriching and fascinating experience for all of us though sometimes exhausting!

Our gratitude goes to the many people who have made the study possible:

- To the 437 member institutions who readily offered hospitality to the investigators and spared many hours from their busy schedules, discussing, giving feedback,and sharing about their work. This has been an inspiration.
- To the 1032 members who replied to the mailed questionnaire and have shared their views freely and frankly.
- To the band of forty investigators, who travelled to remote corners of the country in the heat of summer, undeterred by bus strikes, terrorist problems, inter-state conflicts etc. Their sense of dedication is revealed in the quality of work. They gave up several holidays for the training, planning and feedback sessions as well as for the field work. Some volunteered for two rounds of field work in December and in summer. We are grateful to their Provincials, Superiors, Rectors and Guardians who readily gave permission for them to participate in this exercise.
- To the forty panelists who actively participated in the Policy Delphi Method and shared many valuable thoughts, ideas and perspectives. We are sure that CHAI will continue to benefit from their involvement in the future.
- To the Principal and Staff of St. Joseph's Evening College Computer and Data Processing Centre, who thought through the programming and undertook analysis against the odds of several viruses.
- To the Staff of CHAI, who cheerfully provided us with the necessary information and shared their own ideas and perspectives.
- To the CHAI Executive Board and most specially to Fr. John Vattamattom, SVD, Executive Director of CHAI, for daring to undertake such a journey. We deeply value the trust they have placed in us to undertake this task. They along with representatives of the regional units have also shared their views about CHAI.
- To the Staff of Community Health Cell who supported us through every need and deadline, working late into the evenings.
- Last and most importantly to the Advisory Committee of the Study, who have given much of their time and energy. They have provided us the light of wisdom and expertise and have encouraged us during our difficult moments.

We have tried to give our best to the Study, within our personal limitations, and also within the constraints of a rather tight time framework. The responsibility for any drawback is entirely ours.

FOREWORD

Gandhi Jayanthi Day, 1992.

Uniting together to serve better,a group of dedicated and committed Sisters,working in the field of the Healing Ministry,started on a yatra (journey) in 1943. Under the leadership of Sr. Dr. Mary Glowery,theyformed the Catholic Hospital Association of India for mutual support in the service of the people. What were the objectives of the association? Have they been realised? Have those objectives been changed over the period of time? Do the objectives continue to be relevant today? What changes are necessary to make the objectives relevant in the foreseeable future? What steps should be taken to achieve the objectives?

The Catholic Hospital Association took a bold and necessary step to evaluate the work of the association and to formulate future tasks. The work was entrusted to the Community Health Cell. Dr.Thelma Narayan and her team have been doing an excellent piece of study and research, with the help and advice from Prof.P.Ramachandran,Director,Institute for Community Organisation Research,Bombay, Dr. Ravi Narayan and many others. That report will be ready soon.

It is essential that the report should be acted upon soon and not allowed to gather dust. To enable the members and the association to address the more important findings and issues out of the study,this booklet has been prepared. It is for the study and reflection by each member and groups at various levels - Diocesan,State and National. That reflection and study must lead on to decisions and time-bound action,appropriate for each member and the association.

May the Good Lord guide us to take the right steps in the right direction in the service of the people and carry us in His palms,should difficulties arise.

Dr. C.M. Francis
Chairman
Advisory Committee
CHAI Golden Jubilee Evaluation Study

Bangalore,
02.10.92.

CONTENTS

PART A

INTRODUCTION

This document forms part of a process of ongoing search for meaning, relevance and direction for the work of CHAI and its constituent members, in the context of India today, as integral components of the health and social apostolate of the church in India, and as citizens of the country.

It was in this spirit that the CHAI Golden Jubilee Evaluation Study was initiated by the Executive Board and Director of CHAI in 1991. This was in preparation for the Fiftieth Anniversary of CHAI, to be celebrated in 1993. The process of seeking the signs of the times, from members as well as from others, employed methods of research available to us today.

Efforts were made to be as interactive as possible with members, staff and others, while also maintaining objectivity. Rather than being an outside "expert" evaluation giving recommendations for the future, it attempted to generate and draw from discussion and thinking among people at different levels. This was both from within the Association as well as from outside.

Very many persons have participated and contributed to the process -

- 62.3% of the membership i.e., 1415 institutions have shared information about themselves, and have given feedback and suggestions for the future.
- 40 persons outside of CHAI, with long years of social concern and involvement in diverse fields relating to health and development, actively helped give an outside perspective.
- 40 investigators travelled the length and breadth of the country visiting members, often through difficult terrains.
- The staff, executive board members and representatives of regional units of CHAI also gave feedback and suggestions.

The analysis and report will not be able to capture entirely or do justice to the depth and range of discussions and feedback. However, we are sure the process has generated interest and involvement. Many expectations too have probably been raised!

Some of the major issues and concerns that emerged during the process of data collection and study are being raised in this discussion document. Issues important for the future of CHAI, that need to be discussed by the membership in general are the ones that have been highlighted.

This document has been derived from all the components of the study. **However, it is not a report of the study and its findings. The main study report will be a specific publication giving much greater detail. It will be available for wider circulation within a few months.**

The purpose of this document is to facilitate the second phase of the study-reflection process being planned by CHAI. **This will include discussions at regional levels, in small group meetings, and in individual institutions.**

The document may need to be read in small doses. Different parts may be used for a series of meetings and reflections. It is our hope that issues that have arisen from members and others in the study process, and given in this document could be the focus of,or background in which the Golden Jubilee reflections can take place.

STUDY METHODOLOGY AT A GLANCE

- After a preparatory phase of idea drafts and brain storming, the study started on a full time basis from July 1991.
- The **aims** of the study were:

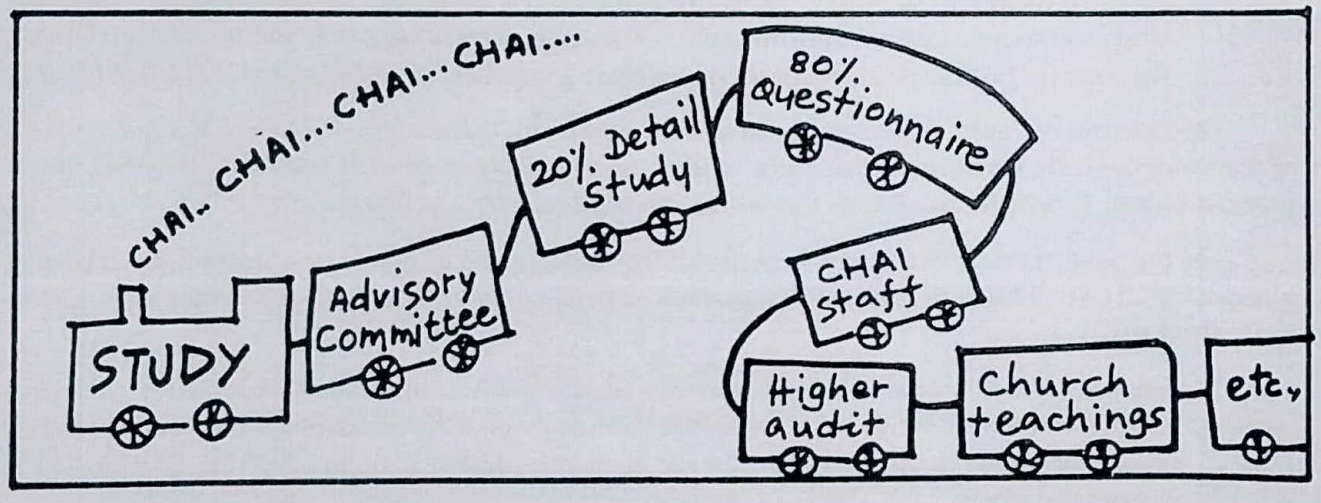
  1. To undertake an analytical study reflection on the Catholic Hospital Association of India during the last five decades focussing particularly on the past twenty five years and the present.
  2. To explore possible roles the Catholic Hospital Association of India could play in the future, in the context of the needs of its members, the national situation and the national health policy, and as part of the voluntary health sector and the health apostolate of the Church.

- Specific objectives and methodologies were worked out towards achieving these aims. These included :

  — an analytical historical review;
  — collection of information and feedback from members;
  — departmental and financial reviews;
  — the use of the Policy Delphi Method to explore future scenarios and roles; and
  — discussions with a number of people associated with CHAI.

The membership as of October 1991 which comprised 2270 institutions, was taken as the cut off point or sampling frame for the study of members. The members are spread across the country. They consist primarily of health centres, dispensaries, hospitals and a smaller number of diocesan social service societies and social welfare organisations like orphanages, homes for the aged, rehabilitation centres etc.

- For a detailed study of members, a 20 percent sample, comprising 455 institutions, was selected using scientific statistical principles. It was a stratified random sample. Representation



according to size of insitution and location was ensured. This group was visited by investigators.

- Forty investigators received a six day preparatory training before visiting the member institutions. We were fortunate to get volunteer scholastics to undertake this important component. They included Capuchins (OFM Cap.,) and Franciscans (OFM) from Kripalaya and Atma Jyothi respectively from Mysore; Jesuits from Vidyajyothi, Delhi; Diocesan brothers of Delhi from Pratiksha, New Delhi; and a Priest from St. Thomas Mission Society, Mandya.

  A field tested interview schedule was used during the discussions. Besides eliciting feedback on the different aspects and programmes of CHAI, information was gathered regarding the work involvements and activities of member institutions and the problems faced by them in the field.

- Questionnaires were mailed to the remaining 80 percent,or 1817 member institutions. This was the same as part A of the interview schedule. The purpose of this exercise was to gather upto-date information about the work of member insitutions, so as to enable future planning to be related to the realities of members and their needs.

- Structured feedback and views from the staff, executive board members and representatives of the regional units of CHAI was also gathered and analysed.

- A financial review (higher audit) was done by an outside expert and departmental reviews are being done along with the departmental staff.

- The Policy Delphi Method was used with a group of forty persons to identify trends in the socio-political and economic spheres in India and their impact on the health status of the population in the country. In this context and keeping in mind the specifics of CHAI, possible future roles of the Association were explored. The panelists represented diverse fields including education, management, communication, theology, psychology, sociology, social work, law, medical ethics, pastoral care, development, nursing and nursing education, different disciplines of medicine, viz., medical college professionals/educators, mental health, community health, policy makers, researchers and representatives of other national level coordinating agencies/ networks in health.

- Secondary sources of information were studied for the section on the national health situation and on Church teachings regarding health and related work.

- The entire study was guided by an Advisory Committee of seven members which met four times during the year.

- The study team consisting of four members was based in Community Health Cell, Bangalore.

- The St.Joseph's Evening College Computer and Data Processing Centre, Bangalore provided the technical and infrastructural support for computer analysis of the data. Their staff helped with programming and supervision of data entry.

  The Staff of different departments of CHAI provided us the necessary support in collection of information.

HIGHLIGHTS FROM HISTORY

Sr. Dr. Mary Glowery.
(Sr. Mary of the Sacred Heart, JMJ)
Foundress of C.H.A.I.

The Catholic Hospitals Association (CHA) was started on the 29th of July, 1943, by a group of sixteen Sisters involved with medical work in different parts of India. This was before Independence, during the period of the Second World War. Though rich in resources, several factors over the years, including colonialisation, had had an adverse impact on the country. The health situation of people then was poor, especially that of women and children. Epidemics and famines took a heavy toll. Medical services, particularly for the majority of the population in the rural areas, were scarce.

The Sisters, all medical professionals, had already been working for many years in remote parts of the country. Some of them had been pioneers in initiating the medical apostolate of the Church during the 1920's. In those days, they had to get special permission from the Vatican to practice medicine and conduct deliveries, as members of religious congregations. Several Sister nurses also worked in Government hospitals in the early half of the century.

Inspired by the teaching of Pope Pius XII to 'organise the forces of good' and by medical associations in India and abroad, the Sisters formed the Catholic Hospitals Association. This was after a few years of ground work with the Bishops, superiors of congregations, Catholic medical institutions and religious medical personnel working in government hospitals. The Resolutions of the first meeting were :

— to establish a Catholic medical college and a collegiate course in nursing,

— to publish a pamphlet or magazine, and

— to appoint a Board of Examiners in nursing and midwifery.

The Association was registered as a Society in 1944. During the early years all the office bearers had full time medical/nursing responsibilities as well. The Association covered India, Burma, Srilanka (and Pakistan after partition) till 1956. They had annual meetings, and since 1944 regularly published an in-house bulletin named 'Catholic Hospital'.

A Catholic medical college committee was formed and after more than ten years of lobbying, fund raising and working through many details, the project was handed over to the Catholic Bishops Conference of India (CBCI).

The CHA Nursing Board functioned for some years and was later closed after the formation of the Indian Nursing Council, which was set up for the standardisation of nursing education.

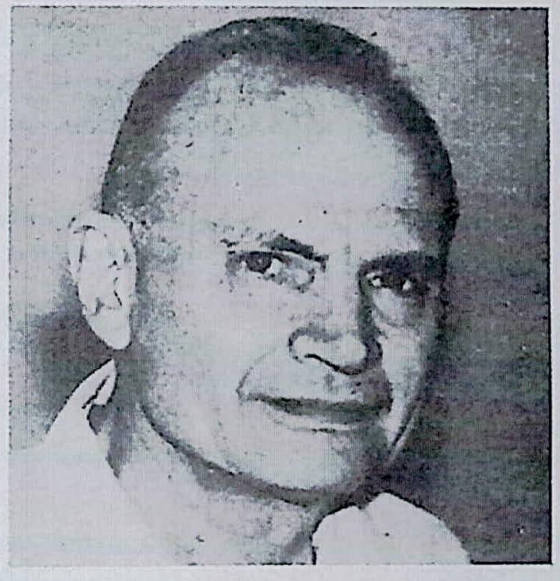
Members played an active role in setting up schools for the training of nurses, midwives and auxiliary nurse midwives (ANM's).

Issues of medical ethics were raised and discussed at various forums of the Church and the medical profession. CHA encouraged and fostered the formation of Catholic nurses and doctors guilds for this purpose.

In summary, the main focus of CHA during the first fourteen years was on :

a. Promotion and upholding of ethical values in medical care.
b. Fostering the professional education of nurses, doctors, pharmacists, laboratory technicians and auxiliary nurse midwives. This was with a view to providing competent and qualified staff for member insitutions.
c. Issues relating to the betterment of medical care and to the professional running and management of hospitals. Members kept abreast with developments within India and also internationally. They were encouraged to join and participate in national professional organisations.

Over the years, the number of Church related medical and health insitutions, and consequently the membership of CHA, also grew. In 1957, the first full time Executive Director of CHAI was appointed. He was also one of the secretaries of the CBCI Commission on Social Action. The bulletin was renamed 'Medical Service'. Much work was done towards the framing of a new constitution, which was registered in 1961 and to establishing sound procedures of functioning.



Fr. James. S. Tong, S.J.
Executive Director of C.H.A.I.
1957 - 1973

The emphasis during the next decade (1957 - 1968) was on :

a. Providing continuing education inputs to its members through the journal, the annual conventions and through seminars,and
b. providing assistance to members to meet their needs for medicines and equipment by developing linkages with various agencies, donors and government.

The annual meetings gradually grew into annual National Hospital Conventions. Different departments developed, namely, Membership; Projects; Publication; Employment; National Hospital Convention and Exhibition; and Responsible Parenthood.

The importance of public health and outreach to the community was recognised. The implications of the Second Vatican Council documents and teaching to health work was discussed at an annual convention. Ecumenical and later secular linkages were further strengthened as a result. Working with government was actively pursued.

In 1969, an important meeting of Christian health leaders in India was held. It was sponsored by the Christian Medical Commission, Geneva. Community Health was identified as a major priority and also the need for working together. As a follow up, the ecumenical 'Coordinating Agency for Health Planning' (CAHP) was jointly set up by the Christian Medical Association of India (CMAI) and by CHAI in 1970. State level Voluntary Health Associations began to be formed from 1970 onwards, with Bihar taking the lead. This resulted from an understanding by CHAI and CMAI, that the voluntary health sector must work together in a coordinated and more decentralised way. Since health was a State subject, it was considered appropriate to have State level associations. In 1974, these were federated at the National level into the Voluntary Health Association of India (VHAI). The Executive Director of CHAI, who had been in that position for seventeen years, was very involved in all these developments. In 1974, he moved from CHAI to the leadership position in VHAI. He was also the moving force, along with others, in the formation of Catholic Charities India, which later developed into Caritas India.

Among several initiatives which received the active support of CHAI were :

i. the federation of the numerous nurses guilds all over the country into the Catholic Nurses Guild of India (CNGI),

ii. the units of St. Luke's Medical Guilds which had been fostered by CHAI were federated into the Indian Federation of Catholic Medical Guilds (IFCMG),

iii. natural family planning and the concept of responsible parenthood were introduced. Later, the Natural Family Planning Association of India (NFPAI) was formed as an autonomous group by several involved people,

iv. the Hospital Pastoral Care Association was formed in 1971. This was the only initiative that did not survive,

v. the Executive Director was also closely involved in the formation of the Indian Hospital Association (IHA).

After 1974, by mutual agreement, VHAI focused primarily on community health, technical issues and linkaging with government. CHAI began to develop further, the more specifically Catholic areas of its work. New departments and honorary consultative committees were set up. These included Responsible Parenthood, Pastoral Care, and Medical Moral Affairs. The Central Purchasing Service (CPS) and legal services were also started.

Further amendments to the Constitution were made in 1978. These objectives of CHAI hold good till today. They are :

1. **To improve the standards of hospitals and dispensaries in India.**
2. **To promote, realise and safeguard progressively higher ideals in spiritual, moral, medical, nursing, educational, social and all other phases of health endeavour.**
3. **To promote community health and family welfare programmes.**
4. **To assist voluntary health organisations in procuring quality amenities.**

Since 1980, which marks the beginning of the present phase, CHAI has continued to grow and develop. Its membership (as of October 1991) is 2215 member institutions, 57 Diocesan Social

Service Societies and 32 individuals who have Associate Membership. In September 1992, the membership was 2308. The office has shifted from the few rooms in the CBCI Centre, Delhi, to a much larger permanent office at Secunderabad. The number of full time staff has increased to about sixty. Medical Service was transformed into Health Action in 1988 and is published by a separate registered society, 'Health Accessories for All' (HAFA). Other publications have also been brought out.

CHAI adopted for itself the goal of 'Health For Many More' (a modification of the Alma Ata goal of Health For All by 2000 AD), with a special emphasis and focus on the poor. An earlier plan was put into action and a department of community health was developed in 1981. The concept of Community Health was understood "as a process of enabling people to exercise collectively their responsibilities to maintain their health and to demand health as their right".

Some of the influencing factors during this phase were :

i. The Alma Ata Conference of WHO (1978),
ii. A regional consultation of the Christian Medical Commission held in Delhi (1980),
iii. The articulation of the National Health Policy (1982),
iv. The social teachings of the Church,
v. The introduction of social analysis by the Indian Social Institute and others,
vi. The growing experimentation in the country in community health and other areas.

In 1983, CHAI adopted for itself the following ten point programme for the next decade:

1. **"Promotion of community health programmes, according to our new vision.**
2. **Promotion of spiritual and pastoral aspects of health care.**
3. **Promotion of "Respect Life" with special emphasis on just wages and healthy human relations etc., in our institutions and promotion of natural family planning.**
4. **Working towards self sufficiency of CHAI programmes, especially by collaborating with the Government at various levels and utilising their resources.**
5. **Building up of solidarity among our member institutions especially by promoting the idea of adopting rural health centres by big hospitals.**
6. **Diocesan and regional level organisation of CHAI.**
7. **Membership drive for strengthening the organisation.**
8. **Promotion of low-cost medical care by influencing a better drug policy, prescription pattern and standardising of drugs.**
9. **Promotion of indigenous medicines and systems of health care.**
10. **Holistic approach to health and training of new types of health care personnel in large numbers".**

New departments and activities were also initiated, for example continuing medical education, library and documentation services, pastoral care (rebirth!) and low cost media. Short courses were offered which ranged from 'Human and Spiritual Growth through Clinical Practice' to a variety of management courses. Short courses in community health and longer community health team training programmes (CHTT) were also initiated. This was later supplemented by a course on

Community Health Organisation, Planning and Management (CHOPAM) in collaboration with VHAI.

The CBCI has always had a section or commission on health. In the 1980's this was for some time part of the commission on Justice and Peace. The CBCI commission on Health Care Apostolate was separated out in 1989. CHAI has always participated actively, in various capacities in these commissions.

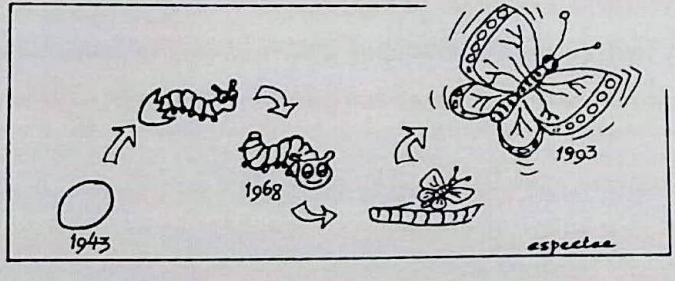
CHAI had initiated the process of drawing up health policy guidelines for member institutions. A draft policy was circulated to all members in 1988 with a plan to finalise this through a process of regional meetings. Following a series of meetings in which CHAI was involved as a participant, the CBCI Commission for Health Care Apostolate brought out Health Policy Guidelines for Church-related health institutions.

Many important events and changes have taken place in its external milieu since CHAI was formed in 1943. These have been within the Church, in the national and international socio-political situation, and also in the area of medicine and health. There have been changes in thinking regarding concepts of causation of disease and types and levels of intervention that would improve the health of people, both as individuals and communities. The health and medical care scenario in India has also changed, with tremendous growth in the government and private sectors and changes in disease patterns among the population.

The role of CHAI today and in the future has to be located in this broader context. Equally important is the role of CHAI as part of the healing ministry/health apostolate of the Church, where health is not seen only in technical, professional or in its socio-political aspects but is also related to the deeper dimensions of personhood, relationships, spirituality and faith and also to wholeness of creation, justice and peace.

At this point in history, it is important for those of us who happen to be present, to reflect analytically on the past and present so that we can be better equipped to build the future.

The early pioneers of the medical apostolate of the Church and of CHAI, thought far ahead of their times. Many of their ideas were considered foolish or at best "impractical dreams". It was recorded in a newspaper in 1944 that CHAI was formed "out of nothing", that is when there were hardly any Catholic hospitals! And Sr. Mary Glowery has been described as a `grain of wheat who dreamt of a golden harvest'. Today we are witnesses to a multiplication of that grain. How we respond to the challenges facing us today may be studied fifty years later! We now ask ourselves the question "Harvest for whom and for what"?



"The important thing is this —to be able at any moment to sacrifice what we are for what we can become." ***— Anon***

CHAI TODAY — A BIRD'S EYE VIEW

1. Distribution of CHAI Members According to Size/Type:

As of October 1991, CHAI has 2302 members spread across the country. The break-up according to size/ type of insitutions is as follows :

a. Health centres/dispensaries with no beds for inpatients to be admitted	—	1148	(49.9%)
b. Health centres/dispensaries with1 to 6 beds	—	388	(16.8%)
c. Hospitals with 7 to 100 beds	—	591	(25.7%)
d. Hospitals with more than 100 beds	—	86	(3.7%)
e. Diocesan Social Service Societies	—	57	(2.5%)
f. Associate members (individuals having no voting rights)	—	32	(1.4%)
TOTAL		2302	(100%)

2. The Geographical Distribution of Members:

a. The four Southern States (Kerala-403, Tamilnadu-380, Andhra-227 and Karnataka-153)	—	1163	(52.5%)
b. Central States (Bihar-160, Madhya Pradesh-205, Rajasthan-30, and Uttar Pradesh-118)	—	513	(23.2%)
c. The North Eastern States (Manipur-20, Meghalaya-47, Mizoram-4, Nagaland-19, Tripura-4, Sikkim-1 and Assam-51)	—	146	(06.6%)
d. Other States (Goa-29, Gujarat-58, Harayana-11, Himachal Pradesh-3, Jammu & Kashmir-5, Maharashtra-94, Orissa-79, Punjab-28, West Bengal-67 and Union Territories-17)	—	391	(17.7%)
TOTAL		2213	(100%)

N.B. *The 57 Diocesan Social Service Societies and 32 Associate members are not included here.*

3. Organisational Structure:

a. CHAI is registered under the Societies Registration Act. The members of the general body elect a nine member Executive Board with a President, two Vice-Presidents, Secretary, Treasurer and four Councillors. Three posts are elected every year, so as to ensure continuity in the Board. Board members are elected for three years and may be re-elected for a second time. The Board appoints an Executive Director, Assistant Executive Director and Administrator. There are various departments in the CHAI Head Office at Secunderabad staffed by over sixty people.

b. Membership is of two classes, constitutent (institutional) and associate (individuals). The latter do not have voting rights.

c. Prior to 1981, voting rights were according to size of institutions. Thereafter a constitutional amendment equalised voting rights to one vote per member.

d. About 15.0 percent of the total membership are life members and the remaining are annual members. Life membership was introduced in the 1980's.

e. Regional/State Units:

There is a provision for the formation of Regional/State Units in the Constitution. Attempts were made to form such units ever since the Silver Jubilee in 1968 with varying success. After 1980 greater efforts were made in this direction. Regional or State units are separate registered bodies, but linked to the Centre. The membership fees are divided equally between the centre and the units. The units at present are :

i. Catholic Hospital Association of Kerala.

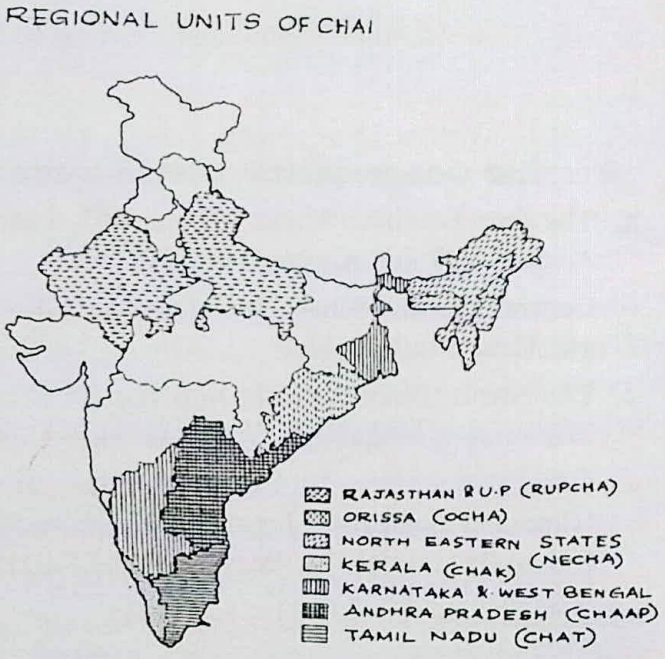
ii. Catholic Health Association of Tamilnadu.

iii. Catholic Health Association of Andhra Pradesh.

iv. Orissa Catholic Health Association.

v. North Eastern Community Health Association (NECHA).

vi. Rajasthan, Uttar Pradesh Catholic Health Association (RUPCHA).



Karnataka and West Bengal have had occasional meetings. Some dioceses also have diocesan level activities. During the early eighties diocesan health coordinators were identified. North and South zone meetings were held. This attempt did not last long.

4. The Headquarters and Units:

A. The Departments at the CHAI office include:

a. Administration (General).

b. Accounts and Finance.

c. Membership.

d. Central Purchasing Service.

e. Community Health with four sub-units

i. Rural Health

ii. Urban Health

iii. Research (Planning stage)

iv. Low-cost communication media.

f. Continuing medical education.

g. Documentation.

h. Pastoral Care.

i. Electronic Data Processing.

B. Zonal Office in New Delhi

C. A separately registered society named 'Health Accessories For All' (HAFA) brings out the monthly magazine called" Health Action" and other publications.

D. Additional Projects:

a. The CHAI Farm Project - with poultry, agriculture, etc for income generation. There are plans underway to start a model integrated health centre with community health programmes and a training centre.

b. A Central Drug Quality Assurance Laboratory is being planned. This will test drugs and pharmaceuticals as part of quality control for rational drug therapy and to support the network of low cost generic name drug manufacturers. A feasibility study has been carried out.

5. Finances:

The funding of the activities of the Association depended on membership fees and donations from members in the earlier years. Later some funds were available by processing purchases of Indian equipment through donor agencies abroad. Additional sources were from exhibitions of medical products at the conventions and advertisements in the journal. This has been restricted since the mid-eighties in order to fit in with the overall philosophy of the Association. In the mid seventies and eighties, funds from foreign donor agencies began to be utilised for specific projects and programmes. Initiatives towards self-reliance have been the starting of a Corpus Fund, the Farm and a raffle, besides the sale of publications by HAFA.

6. Linkages:

a. CHAI has close interaction with CMAI and also with VHAI. The "Health and Healing Week" reflections and celebrations are jointly planned with CMAI. Together they have brought out the Joint Hospital Formulary. The three organisations also jointly sponsor and conduct seminars and workshops.

b. CHAI also interacts with the CSI, Ministry of Healing, the Asian Community Health Action Network (ACHAN), the All India Drug Action Network (AIDAN) and the International Association of Catholic Health Care Institutions.

c. CHAI cooperates with government and other organisations to promote health and development.

PROFILE OF CHAI MEMBERSHIP — 1992

A member is the most important person for us

She is not dependant on us, we are dependant on her,

She is not an interruption in our work, she is the purpose of it,

She is not an outsider in our business, she is part of it,

We are not doing her a favour by serving her,

She is doing us a favour by giving us an opportunity to do so.

— *Adapted from Mahatma Gandhi.*

The profile of the present membership of CHAI indicates its distribution, diversity and richness. For those familiar with the history of CHAI, it is evident that the membership is a dynamic, alive entity, undergoing several changes over time.

In this document only a brief sketch is given so that the discussion about the future role and strategies of CHAI may take into consideration the realities of the membership today. Greater detail and analysis is given in the main report.

The membership of CHAI as of October 1991 was taken as the cut-off point for the study. This comprised 2270 institutions including Diocesan Social Service Societies. Associate members (individuals) were not included. We have data from 1472 or 64.8 percent of the total membership. Included in this group are the 20 percent of the total members (the stratified random sample) visited by investigators and the respondents to the mailed questionnaire. The Runs Test performed showed that these respondents were randomly distributed. Of this group of 1472 institutions, 57 i.e., (3.9%) have closed/are not functioning presently. This is 2.5 percent of the total membership.

The information that is given in this section is therefore derived from 1415 active respondent member institutions. This number is the denominator in all tables.

1. Year of Establishment:

- 14 institutions (1%) were established before 1900,
- 93 (6.6%) during the first fifty years of this century, and
- 1186 (83.8%) thereafter, till October 1991.

While institutions established earlier were mainly hospitals, in later decades smaller dispensaries and health centres became more common.

2. Ownership/Management:

- 66.9% are owned by congregations of women religious, while 76.9% are run by them.

3. Geographical Location:

- 67.8% (959) institutions are in rural areas,
- 15.6% (221) in tribal areas, and
- 16.6% (235) in urban areas.

Thus 83.4% are located in rural/tribal regions. At the national level, all sectors put together, hospitals, beds and doctors are more concentrated in urban areas compared to rural areas in a ratio of 80:20. Dispensaries, however, are more rural based. This is, therefore, not very different from the overall national situation. However, the level of functioning and effectiveness of Government primary health centres and dispensaries is very variable.

4. Nature of Institution:

- 93.9% (1,329) are primarily medical care institutions. Of these
  - — 57.0% (806) are dispensaries/health centres,
  - — 18.7% (265) general hospitals,
  - — 9.2% (130) maternity centres and maternity centres cum dispensaries/hospitals.
  - — 4.1% (058) community health centres/projects.
  - — 4.9% (070)have a specific focus on leprosy, tuberculosis, mental health, cancer etc.
- 6.1% (86) include social welfare organisations (homes for the aged, orphanages, rehabilitation centres etc.) and diocesan social service societies. Most of these have components of medical/health work.

5. Medical Care Institutions According to Bed Strength

- 35.5% (502) have no beds, and
- 21.6% (306) have one to six beds.

This large group of 57.1% (808) could be considered as health outposts or primary health centres.

- 32.3% (458) are small hospitals with 7 to 100 beds. Of these 318 have 7 to 30 beds.
- 4.90% (69) are large hospitals with more than 100 beds. Of these only 3 have more than 500 beds.

Different strategies would be required to meet the needs of these broad groups of members, namely health centres, small hospitals, large hospitals, social welfare organisations and diocesan social service societies. The work or circumstances in which they function as well as their needs, problems and potentials would be quite different.

6. Distribution of Hospital Beds:

The total number of hospital beds in the respondent institutions is 31,245. A further analysis of the distribution of beds is revealing :

a. Rural-Urban Distribution of Hospital Beds

- — 58.1% (18,160) are in rural areas,
- — 4.9% (1,521) are in tribal areas, and
- — 37.0% (11,564) are in urban areas.

b. Statewise Distribution of Hospital Beds

- 41.0% (12,827) are in Kerala, 30.1% (9,418) are in the remaining three Southern States, namely Tamilnadu - 11.9% (3,713), Andhra Pradesh - 11.5% (3,599) and Karnataka - 6.7% (2,106). The remaining States have 29.0% (9000) beds.
- 81.3% (25,390) are located in States where health indicators are relatively good, that is, where the targets for 1990 laid down in the National Health Policy have been achieved. And 18.7% (5,855) are in the States where health indicators are poor.

Historical factors probably account for this pattern. It could however be suggested that further investment in terms of infrastructure and expansion should be in areas of greater need.

7. Systems of Medicine/Methods of Healing Practised:

A fairly large proportion of members use methods/systems of medicine other than allopathy. In these cases, most often more than one system/method is practised.

- 93.9% (1328) use Allopathy,
- 24.7% (350) use Herbal Medicine,
- 10.6% (150) use Ayurveda,
- 8.3% (117) use Naturopathy,
- 7.1% (101) use Homeopathy,
- 4.5% (64) use Acupressure,
- 4.4% (63) use Magnetotherapy and
- 4.4% (63) use other systems/methods.
- 61.7% (864) practice only allopathy, 3.1% (44) do not practice allopathy and 32.8% (464) practice allopathy along with one or more methods/systems of medicine.

During the past ten years CHAI has promoted herbal medicine and non-drug therapies. So too have other organisations. The time is ripe now to initiate investigation and study the strengths and weaknesses of these methods.

8. Work Profile:

- 46.3% (655) have extension/outreach programmes.

A range of approaches namely camps, mobile clinics and extension services are used for curative and preventive/promotive health work. Some are also involved in awareness raising activities.

- 86.9% (1,230) are involved in some type of mother and child health work.
- Communicable disease control programmes
  - — 22.4% (317) have tuberculosis control programmes,
  - — 12.9% (183) are involved in control of leprosy,

— 37.2% (526) in control of diarrhoea and gastrointestinal disease,

— 40.1% (568) promote oral rehydration solution.

- 63.7% (902) have programmes for health education and a variety of methods are used.
- 46.8% (633) are involved with awareness raising activities among the community with whom they work. A wide range of issues are taken up.
- 32.3% (456) undertake preparation of some medicines in their institutions. These include mixtures, ointments, ORS packets, powders etc.
- 20.2% (286) have introduced rational therapeutics in their institutions.
- 13.4% (189) purchase medicines from low-cost drug manufacturers.
- 12.6% (179) have got herbal gardens.

9. Time and Budget Allocation for Preventive Work:

- 53.0% of members spend more than 50% of their time and 58.3% of them spend more than 50% of their money for preventive and promotive work.

10. Training

- Training of a variety of community based workers is undertaken by the members.

  — 29.1% (412) train community health workers,

  — 9.7% (138) train traditional birth attendants (dais),

  — 8.1% (114) train natural family planning teachers.

- Training of more specialised health personnel is undertaken by 6.4% (90) institutions.
- 30.4% (430) have continuing education programmes for their staff.

11. Distribution of Personnel:

There are a total of 28,133 personnel working in these 1415 institutions.

- 11.3% (160) were single personnel run institutions,
- 78.4% (1109) had nurses,
- 41.0% (581) had doctors,
- 22.0% (312) had pharmacists, and
- 30.9% (430) had laboratory technicians.

12. Referral of Patients:

The member institutions refer patients to the following sectors :

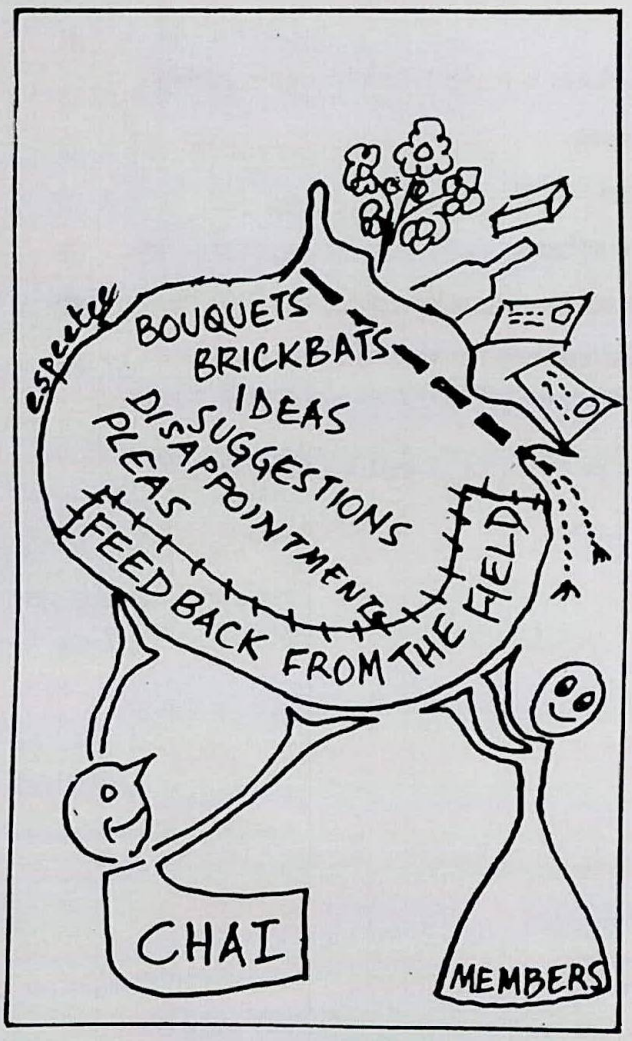
- 66.8% (945) to government hospitals,
- 40.0% (567) to mission hospitals,
- 36.6% (518) to private hospitals.

PERCEPTIONS FROM THE FIELD

Feedback on various aspects of CHAI has been gathered from members, those on the Executive Board, representatives of regional units, as well as from the staff of CHAI.

All members have had the opportunity to share their views regarding the strengths and weaknesses of CHAI, their expectations from CHAI and their suggestions regarding future thrusts. The 20% member institutions which were selected for a detailed study gave feedback on objectives, organisational structure and each of the various programmes and activities of CHAI. The level of involvement of members with CHAI during the past five years was also studied.

The overall response rate to the mailed questionnaire, as well as the response to each question has been high. The volume of information gathered has been large. The first round or the provisional analysis of this data has been done. However, more time is required for further analysis, integration and assimilation.



In this section, keeping in mind the above constraints,some of the main findings from the members' feedback have been given. This is to make available the trends of views of members. This would help as part of the background for the regional/small group meetings being planned during the Jubilee Year.

A process of 'reductionism' has been necessary as we have had to code, summarize and be concise. The main report will cover these aspects in much greater detail.

Strengths

The fifteen major strengths of CHAI in descending order of priority, as identified by members are given. 62.0% (878) members responded to the question on strengths.

1. Support, concern and service for its members.

   It is "a hand to hold on to" in the words of a member.

2. "Health Action" and other publications.
3. Training programmes, seminars and courses.
4. Meetings and correspondence with members.
5. That the association is organised and is functioning well.

6. The large number of members spread throughout India — that it is a national level body.
7. It is a network imparting education to Catholic hospitals and dispensaries.
8. It is a forum for unity, where like-minded people can come together.
9. Conventions and similar meetings.
10. Community health policy.
11. Dedication to health work.
12. Alertness to the needs and signs of the times.
13. Philosophy and vision.
14. Preferential option for the poor, reaching out to the marginalised and involvement in social issues.
15. Dedicated and efficient staff.

Weaknesses

The fifteen major weaknesses of CHAI in descending order of priority as identified by members are given. 45.0% (640) member institutions responded to the question on weaknesses.

1. Poor interaction between CHAI and its members, poor personal contact and communication, and sense of alienation felt by members.
2. Inadequate focus on rural based members and their activities.
3. It does not fulfill the needs of its members and does not look into their problems.
4. CHAI programmes are not accessible to many members in terms of cost and their location, especially for the smaller ones.
5. Poor functioning of the regional and State units. The centre does not take much interest in them.
6. Services offered are meagre and inadequate.
7. The administration and functioning is not efficient.
8. CHAI is not practical in its approach.
9. Concentration on bigger hospitals.
10. Discrimination between members in its service.
11. Too much centralisation of power.
12. Charging for "Health Action" to small/poor institutions.
13. Lack of initiative of members in activities of CHAI.
14. Lack of professionalism. It is run as a religious association. Lack of qualified personnel in the medical/health field.
15. It does not stand for its objectives.

Expectations

The fifteen major expectations that members have of CHAI are given. 69.0% (978) members responded to the question on expectations.

1. Better interaction between CHAI and members through visits, more personalised correspondence.
2. Financial assistance.
3. Guidance and support to member institutions, especially smaller ones.
4. Training programmes at the State level, preferably using regional languages.
5. Medical aid (supply of medicines) on a regular basis.
6. CHAI to focus on rural areas.
7. Provision of information to improve health work.
8. Courses/seminars on labour laws, social analysis.
9. Production of health education material in local languages.
10. CHAI should be ready to help members out of their problems.
11. CHAI to arrange for doctors who are efficient and service minded to work in member institutions.
12. Support to/ promotion of community health programmes.
13. Promotion of low cost drugless therapy.
14. Strengthening of regional units.
15. Training for community health workers.

Future Thrusts

The fifteen major suggestions for future thrusts of CHAI from members are given. 55.0% (775) members responded to the question on future thrusts.

1. Focus on rural and tribal areas and their development.
2. Community health and development.
3. Health for All by 2000 AD, including cooperation with Government to achieve this goal.
4. Health education/Health awareness.
5. Training programmes to be organised on different aspects of health care.
6. Wholistic health.
7. Preferential option for the poor and social justice in the healing ministry.
8. Interaction with member institutions.
9. Women's development programmes.

10. Work on prevention of AIDS/Cancer/mental illness.
11. Alcoholism and Drug dependence.
12. Assistance to institutions working for rural health.
13. Regional planning and action as per the vision of CHAI.
14. Support to members in their activities.
15. Supply of free medicines.

DETAILED STUDY FINDINGS

Some of the key findings from the detailed study of the members are highlighted here. These were the 20% of members (455 institutions) visited by investigators. Fifteen institutions could not be covered due to unforeseen reasons, thirty two were closed and one institution refused to participate. The number of institutions functioning currently in this group is 407. This therefore, is the denominator in the percentages/tables given in this section.

A. Level of Interaction with CHAI:

- 97.3% (396) receive the **circulars** from CHAI regularly.
- 13.8% (56) have been **visited by staff members/office bearers of CHAI** during the past five years that is, 2.8% per year. A higher percentage of institutions with bed strength of more than 6 were visited than smaller institutions. Institutions visited were more in regions of the country with poor health indicators rather than those with good/better health indicators. More urban based institutions are visited than rural and tribal. The differences given here are statistically significant.
- 25.1% (102) institutions have **participated in some programmes of CHAI** during the past five years. These include seminars/workshops on rational therapeutics, ORT, herbal remedies, spiritual growth through clinical practice, pastoral care, management and others. They also include diocesan and regional level programmes. A total of 315 persons from this sample participated in these during the past five years, that is, more than one person attended per institution. During the past five years, there is a gradual increase in the number of institutions participating per year.
- A large majority i.e., more than 80% found the contents of the programmes useful. They also felt that the seminars were well conducted.

B. Conventions:

- 32.4% or 132 member institutions have participated in annual conventions during the past five years, that is, the annual average is 6.5%. The number of persons from the sample who have attended conventions during these five years are 250. Again more than one person attends per institution.

The themes of the meetings during the past five years were :

a. Health as if people mattered.

b. Our health care mission - a search for priorities,

c. Our hospitals - towards greater accountability,

d. Financial administration and project planning,

e. Women in health care.

The majority found the themes useful, the sessions interesting and the conventions in general well organised.

- The **follow up** by institutions after conventions is low with an average of 3.5% (15) of institutions having followed up conventions during each of the past five years.

C. Publications - Health Action:

- 92.9% (378) members received Health Action during 1988-90.
- 66.6% (271) of the sample now subscribe to Health Action. 77.3% of urban, 77.9% of tribal and 62.3% of rural based institutions subscribe. The difference is statistically significant.
- The large majority (95.5%) felt that the magazine was relevant, and that it was interesting. A smaller number (4.3%) felt that it was too technical.
- On the whole, it was highly appreciated and found to be useful and informative.

D. Central Purchasing Service (CPS):

24.6% (100) institutions from the sample have availed of the services of Central Purchasing Service at any time in the past.

(The 5 year time period was not considered for this Department)

- 42.4% of high bed strength institutions (more than seven beds) and 20.1% of low bed strength institutions (less than six beds) have availed of the services of Central Purchasing Service.
- 50.0% of urban based institutions, 24.5% of rural, and 13.8% of tribal based institutions have used Central Purchasing Service.

E. Catholic Medical Mission Board (CMMB) Medicines:

53.3% (217) members received CMMB gift supplies during the past five years.

81.6% members felt that the medicines were useful and 16.1% said it was not useful. However, 41.0% mentioned that the time period between receiving a consignment of medicines and the expiry date was very short, while in 20.3% the expiry date was already past when the consignment was received. In 50.2% cases the time interval was sufficient.

F. Discretionary Fund:

27.5% of members (112) received grants from the Discretionary Fund during the past five years.

Six institutions received the funds twice during the past five years.

G. Project Proposals:

During the past 5 years, project proposals from 9.6% (39) member institutions had been forwarded to funding agencies through CHAI or had been referred to CHAI by the agency.

H. Community Health Department (CHD):

- 8.6% (35) member institutions participated in programmes organised by the CHD during the past 5 years. A total of 150 persons participated in programmes such as orientation seminars, short term training, CHOPAM course (Community Health Organisation, Planning and Management),workshops, exchange programmes etc.
- 7.4% (30) members were fully aware of the vision of CHD, 91.1% (341) were partially aware, 1.5% (6) were ignorant and 7.4% (30) did not respond to the question.
- 84.8% members (345) said that the CHD vision was relevant to their work, 9.3% (38) felt it was not relevant. A significantly greater proportion of respondent institutions based in regions where the health indicators are poor and those from smaller institutions found the vision relevant in their work.

I. Medical Ethics:

85.5% member institutions (348) felt that CHAI should have a Department of Medical Ethics. A large number of areas were listed as being important to be covered by this department.

J. Financial Aspects of CHAI:

28% members (114) from the sample participated in fund raising for CHAI. This was through the raffle (85), by donations to the Corpus Fund (26), by contribution to the Golden Jubilee Funds (8). Five members did not specify how they participated. Ten member institutions participated in more than one way.

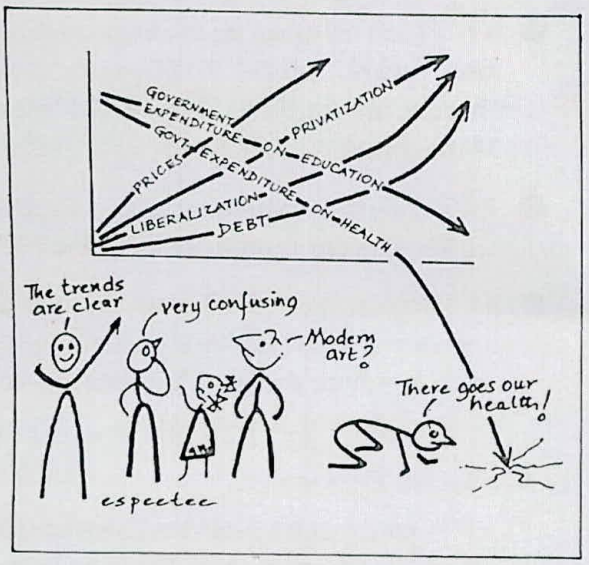
"Trees may die..... but the forest lives for ever"

— Anon

DIRECTIONS FROM DELPHI

Delphi speaks of the Future Scenario

Using the Policy Delphi Method of research, forty panelists helped in determining future trends likely to occur in India, during the next fifteen years, in the economic, social and political spheres, that would have an impact on health. Similarly, they also helped in predicting the possible future health scenario in the country.



It is in this broader context that the health work of CHAI and its members is situated. A brief summary of findings is given. Two rounds of the process have been conducted so far. This will be completed and reported separately.

A. Economic Trends:

The majority (80 percent) of panelists felt that :

- Present trends in economic policy are likely to continue. We will have devaluation, privatisation, liberalisation, an increase in exports, an increased need for repayment of foreign loans and a decrease in government spending.
- Reduced government expenditure will be primarily in the service and development sector. Subsidies to health, education, housing etc., will reduce. Budget allocation per person for health will reduce.
- The economic process will benefit the business and industrial groups most and to some extent organised labour. The majority , comprising marginal farmers, unorganised workers, landless labourers and daily wage earners will not be benefitted. Children, women and the illiterate will suffer most. Poor people everywhere will lose control more and more of the ability to determine their livelihood and lifestyles. Their health status will deteriorate and they will be unable to avail themselves of the services of privatised health, education etc.
- Increasing commercialisation and privatisation of medical and health services will be promoted by the leaders of the country, the medical profession and the middle class.
- Cost of diagnostic and curative medical services will rise at a galloping rate, with the poor having less and less access to them.

A small number felt :

- that the present market economy would increase income and more people would be brought above the poverty line. Overall health would improve.

- There would be greater professionalisation in hospital/health management and the development of insurance as a means of third party payment.

B. Social Trends:

- The nuclear family status will become more common, complicated by increasing breakdown and inadequate care of the aged population who will increase in numbers. This may worsen the overall status of women rather than improve it. However, improvement of education, particularly of women, will have some positive impacts on family health.
- Increasing urbanisation, with inadequate basic facilities for the poor and increasing marginalisation of sections of the population, including dalits, will take place.
- There will be a progressive erosion of values in social life. The sense of community will lose ground and a narrow sense of individualism will prevail. There will be increase in regional, ethnic, linguistic, communal and caste conflicts, with increased social tensions due to increase in violence. Several factors will affect general mental health, leading to increased awareness, but also to a growing sense of helplessness and unrest.
- Mass media (television) will lead to increasing consumerism and replacement of old values with increased abandonment of traditional food practices and traditional systems of medicine and increased smoking and drinking culture.
- Mental health problems will increase caused by increasing confusion, lack of identity and responsibility, materialism vs humanistic beliefs, false values and lack of spiritual strengths.
- However there will be improved educational levels, increased litigation in the health field and strengthening of consumer protection councils.
- Science and technology will improve the life of the average person and there will be an increased focus on ecological and gender issues in public policy.

C. Political Trends:

- The 'new' unipolar world will decrease the autonomy of nation states.
- The political instability and inadequacy at national level will continue with corrupt, dishonest and self seeking politicians dominating the political scene. Political parties will make use of divisive forces and the conservative forces will increase.
- Destabilisation due to growing disparity between haves and have nots and inequitable distribution of resources will continue. There will be a greater awakening among the marginalised especially dalits, tribals, and backward classes with increased participation by them in social, political and economic processes.
- There will be an increased demand for autonomy to states and greater decentralisation, with an increase in separatist movements as well.
- There will be increased political consciousness and student movements with an increased demand for people centred participatory processes.

D. Health Scenario in India:

"The health problems of India will show a complex epidemiology in the years ahead. While we shall continue to have problems of poverty, poor hygiene, poor nutrition and poor environment, we shall increasingly experience the problems of development, affluence and modernization. New diseases will come up along with the resurfacing of older disease problems with newer trends and patterns. While this 'double burden' of disease will severely stretch our limited resources, our ability to deal with the situation will be severely hampered by the broader socio-economic, political, cultural factors emerging on the national and international scene that will determine our development, welfare and health policies".

The significant health problems we will have to tackle in the years ahead will be :

1. Nutrition related problems — malnutrition complicated by increasing chemicalisation and adulteration of our foods.
2. Water borne diseases including diarrhoea, dysentery, gastroenteritis, typhoid, cholera, hepatitis B and parasitic infections.
3. Communicable diseases like malaria, tuberculosis, leprosy, kala-azar, acute respiratory infections and preventable childhood diseases.
4. Non-communicable diseases including heart disease, hypertension, diabetes and cancer.
5. AIDS.
6. Problems of mental ill-health including a whole range of stress-related disorders, psychosomatic and psychological problems, suicides and dementias.
7. Addictions and substance abuse problems.
8. Pollution related diseases including allergies, asthma and other hazards.
9. Disabilities and handicap problems.
10. Health problems of the aged.
11. Iatrogenic diseases.
12. Accidents.

These health problems will be further complicated by an increasing number of issues significant to health and contributing to the magnitude. These will include :

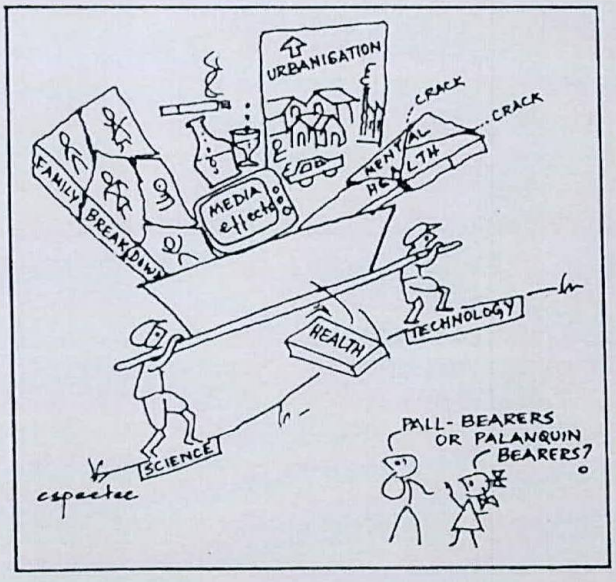
1. Increasing environmental pollution and deterioration of ecology.
2. Increasing challenge of providing basic environmental sanitation.
3. Urbanisation and its consequences/contribution to health of the urban poor.
4. Increasing importance of ethical issues in medicine and medical care.
5. Rational therapeutics in the context of a growing abundance of drugs.
6. Problem of increasing population growth coupled with high literacy and inadequate health resources.
7. Increasing violence in society and its consequences on social health.

In response to the challenge of developing and sustaining health care delivery systems to meet

these problems and tackle these issues, the following will become significant for the planning process in health care.

1. Health care planning will have to meet the challenges of priorities, equity, limitation of resources, rural-urban disparities, clarifying the role of technology, access, roles of government, private and voluntary sector.
2. Costing and financing of health care will become crucial in the context of the market economy. Commercialisation and issues such as cost-effectiveness, self financing, affordability and cost escalations will become significant.
3. Human health manpower development will be complicated by inadequate supplies of the right type of doctors and health team members for primary health care,side by side with over production and overspecialisation of the wrong categories of health workers for secondary and tertiary levels.
4. Rational drug policy that will deal with availability, distribution and adequacy or essential drugs side by side with the control of misuse and overuse of drugs.
5. The challenges of providing basic needs and primary health care for all.
6. The needs, priorities and appropriate choices for secondary and tertiary health care.
7. Health education to promote positive health attitudes and capacities towards primary health.
8. Integration of medical systems, both western and indigenous.
9. Research in alternative approaches, health behaviour, women's health and holistic health care.
10. Promotion of holistic health care of positive/wellness model with stress on five basic dimensions of self responsibility, physical fitness, nutritional awareness, environmental sensitivity and stress management.

Though the health scenario may seem somewhat bleak in the next fifteen years, the greatest positive task facing health organisations, such as CHAI and its members, will be to evolve a creative multi-dimensional, multi-disciplinary and people based response to the challenges of the future.



"Everyone has the right to a standard of living adequate for the health and wellbeing of himself and his family....."

— UN Universal Declaration of Human Rights, 1948

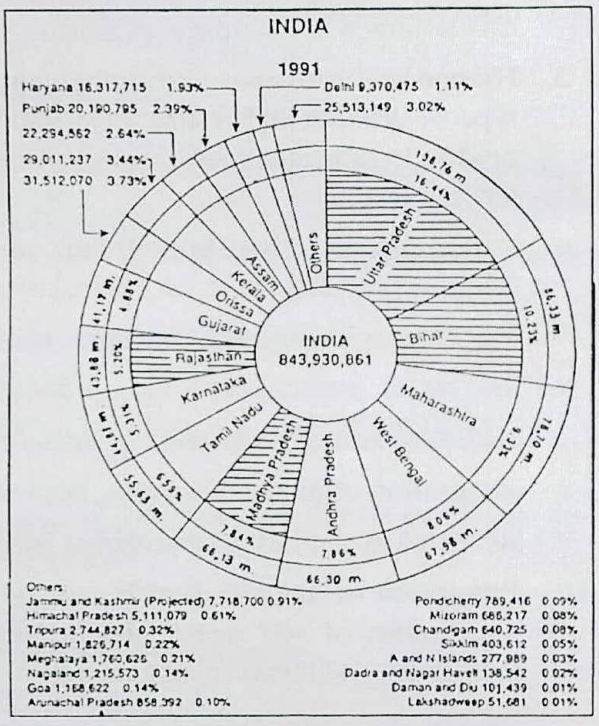
"The enjoyment of the highest attainable standard of health is one of the fundemental rights of every human being without distinction of race, religion, political belief, economic or social condition"

— Preamble to WHO Constitution, 1946

GLIMPSES OF HEALTH, DISEASE AND RELATED FACTORS IN INDIA

CHAI and its constituent members all work towards bettering the status of health of people in India, towards alleviation of pain and suffering and the curing of diseases.

It is important to keep in touch with the prevailing patterns of diseases in the country in different regions and to understand the causative factors of disease and ill-health among people. New insights and discoveries, different perspectives and approaches all contribute to some understanding of this complex, multifactorial process. This helps towards evolving methods of intervention that seem rational and likely to meet with some success. It also helps us to realise that non-medical interventions can have a tremendous impact on health, both good and bad. This realization helps us to recognise that several people in society, infact are part of the health "team"!



A brief glimpse of health, disease and related factors in India is given here. More detail is provided in Part — C for deeper study.

- Forty percent of deaths still occur in children below the age of five years.
- The Infant Mortality Rate (IMR) is 80 per 1000 live births (1990 prov.) and Crude Death Rate is 9.6 per 1000 population (1990 prov.). Several other developing countries, for example China, Srilanka, Phillipines, Cuba etc., have a much lower IMR than India.
- There are major differences between different States and regions in the health status of people. The States of Bihar, Madhya Pradesh, and Uttar Pradesh, where a large proportion of our population live, are the worst off.
- However, within each State, even in the most developed ones, there are districts, areas and groups of people that have a very poor health status. Class and caste factors are important determinants.
- There are big urban-rural differences and within urban areas, the urban poor suffer most.
- There are large gender differences between women and men, the girl child and the boys. Maternal death rates are unacceptably high as compared to other parts of the world.
- Though death rates are declining, morbidity continues to be high.

- The old scourges of communicable diseases still take their toll. Small-pox and plague have been eradicated. However, tuberculosis, leprosy, filaria, malaria, kala-azar in some areas and waterborne infectious diseases cause a tremendous load of morbidity or disease among the population.
- Non-communicable diseases are on the increase. They include cancers, cardiovascular diseases etc. They too affect the poor the most.
- Levels of under-nutrition, though showing some improvement over the years, continue to be high.
- 31.0% of the rural population has access to potable water supply.
- 0.5% of rural population enjoy basic sanitation.
- The population grows with an addition of 16 million persons every year, the Crude Birth Rate being 29.9% per 1000 (1990 prov.).
- Between 30 to 40 percent of the population continue to live below the poverty line.
- Deep rooted hierarchical stratification of society with class and caste divisions also continue.
- Growing fundamentalism, communalism, regionalism and separatism, with the increasing use of violence and terrorism, take their toll.

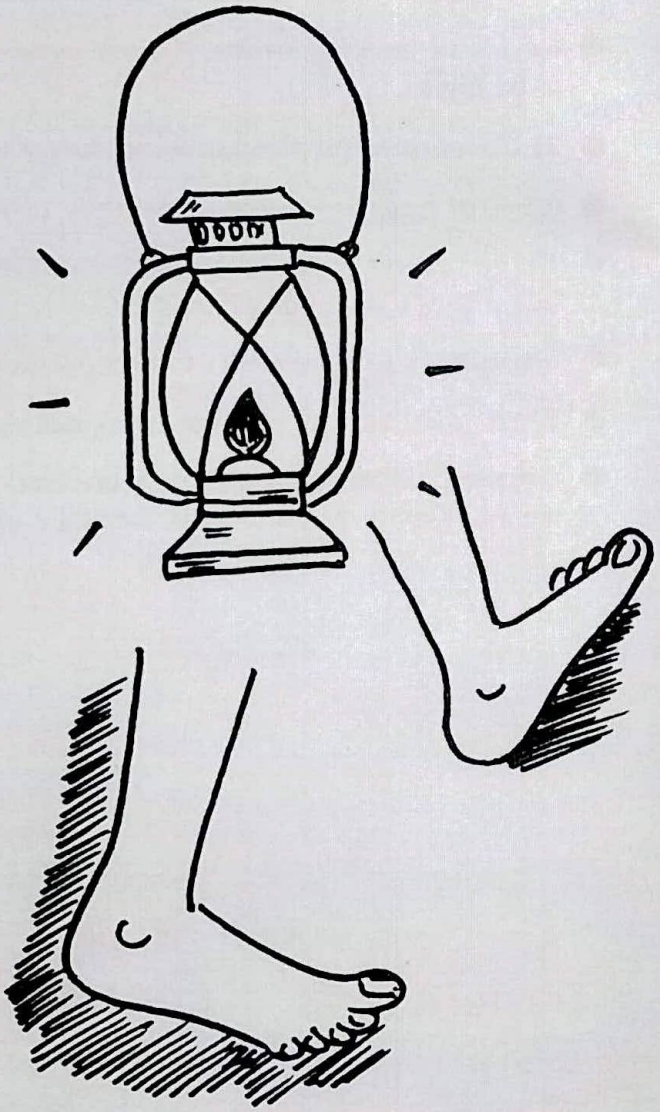
"The Constitution of India..... aims at the elimination of poverty, ignorance and ill-health and directs the State to regard the raising of the level of nutrition and the standard of living of its people and the improvement of public health as among its primary duties, securing the health and strength of the workers, men and women, specially ensuring that children are given opportunities and facilities to develop in a healthy manner"

— Constitution of India

A LAMP TO GUIDE OUR FEET

Church Teachings on Health and Related Work

The formation and growth of CHAI and its members have been inspired and sustained by the deep faith dimension of all who have been actively involved in it. Many hearts have been moved by the ceaseless and challenging call to respond to human suffering. These responses have taken varied forms. In the fifty year history of CHAI one can see that fresh understandings and insights have had an influence on the work of Church related institutions in this sphere.



There have been church related medical care institutions in India since the seventeenth century. At the turn of this century there were about nineteen such mission hospitals/dispensaries in the country. Sister nurses also worked in government hospitals. The origin of CHAI took place under the slogan "Union gives strength" in 1943. As has been mentioned, one of the factors responsible for the formation was the exhortation of Pope Pius XII to nurses and medical workers to "organise the forces of good". This coming together was a source of strength and over the years there has been an increase in numbers. Later the Second Vatican Council opened the doors to greater humanism and to ecumenical and secular dialogue and linkaging. Challenges that arose from here opened CHAI to community health work. Over the years the social teachings of the Church evolved towards making a preferential option for the poor almost a mandate. Theological perspectives of working in solidarity with the marginalised and impoverished have been growing in Asia probably drawing inspiration from developments in Central and South America. There is a growing deepening in the understanding of poverty, dehumanised conditions, inner conflicts and struggles, as well as ecology and other specific issues that pose a challenge to all those involved in working with people.

Excerpts from statements/reports of important church bodies on health and related work are now given. This is to facilitate reflections by individuals, institutions and small groups during the Jubilee Year

The CBCI report of the meeting in Bombay in 1971 gives the following statements on "Poverty and Development"

> "For us who accept the teaching of God and of His Son Jesus Christ, love of one's neighbour assumes a position of centrality so profound and pervasive that men and his concerns have become both the common task and love of both religion and development. Jesus Christ's own mission was deeply involved in the alleviation of human needs. He provided bread of life for hungry crowds, new limbs for the handicapped and restored the sick to health. The Church must carry on His mission and He speaks to us today in the demands of our fellowmen for bread, health, education, work - in short for human dignity and justice.
>
> To achieve this aim, the church must accept that health personnel, services and relief work will always have their important place, the more relevant and meaningful efforts today will concentrate on change of atmosphere, transformation of structures, creation of new relationships and a fresh value system and provision of ampler freedom and wider opportunities for all men".

The CBCI Memorandum to the 1971 Synod of Bishop in Rome added,

> "Love implies an absolute demand for justice, namely a recognition of the dignity and rights of one's neighbour. Thus love cannot co-exist with injustice of any kind, and a keen love for our people must drive us with irresistable force to fight against the injustice which oppress them".

The **Pontifical Council, Cor Unum** set up a working group in 1976 to examine Primary Health Care. Their report was entitled "Health Work for Human Development". A second group was convened in 1977 which brought out a report "The New Orientation of Health Service with respect to Primary Health Care Work".

This report is of relevance to Church related health institutions in India. Both these reports interestingly were before the famous Alma Ata Conference of WHO in 1978, where "Health For All by 2000 AD" was enunciated as a world wide goal, and primary health care accepted as a major strategy. However, they did reflect the conclusions of the 1975 meeting of the WHO.

The report stated that "Jesus considered suffering and sickness as forming part of the "less human" situations which the Encyclical "Populorum Progressio" asks us to endeavour to make "more human". Since human development also means solidarity, the need to work with the family, neighbourhood and village and the practice of community medicine was considered necessary. Health personnel should "listen and learn" and should be "more concerned with fostering action than undertaking it themselves".

The document set the focus or framework for change very forcefully.

> "The mission that we have been given is a call for a true conversion of our hearts and also of our methods .....since Christians are the leaven we must reach out towards the masses by

providing simple, accessible and promotional health care..... The members of the community must be helped where necessary, to become aware of their own problems and to express them, so that, here again they become the craftsmen of their own development".

"The emphasis given to the new primary health care policy has shown the vital importance of a whole motivational approach on the part of those who work in the health field or for health improvement. Unless this new approach on the part of the personnel is inculcated through special courses that need thorough planning and implementation by highly qualified staff, the new orientation to be followed by the various health services will simply not come about."

"Christians are citizens just like any one else, and must be committed to the struggle against underdevelopment".

"Members of religious congregations must take a good hard look at the current conditions under which they are working in order - when and where necessary - to redirect them. It sometimes happens that as a result of changes which not everyone is necessarily aware of, too many of them work in hospitals and health centres that have become too expensive for the majority of the population and are only within reach of the pockets of a certain "elite" who can afford them. In this case the leaven is too far removed from the loaf".

They also spoke of a time when the government started providing health services - "far from being discouraged or useless as a result of this new state of affairs, they must see it as a golden opportunity to play an active part in the national endeavour to bring about integral and mutually responsible human development".

In 1978, responding to the urgent needs of the country, the CBCI outlined the new challenges before the Church in its apostolate.

"The Church is heavily engaged in education, health services and development work and her contribution in these fields has been appreciated..... However, we must constantly evaluate our traditional insitutions so that they become genuine witnesses to the Church's concern for the building of a just society and thus be effective instruments of social change".

"We want our health services to take primary health care to the masses, particularly in the rural and urban slums. Catholic hospitals and dispensaries should stress the preventive and promotive aspects of health care. Specifically, we would urge them to join hands with the civil authorities in their programmes for the eradication of leprosy. Our health outreach programmes may demand a change in the routine, especially of religious communities of men and women involved in this work and their formation should prepare them to meet the new spiritual challenges that are posed".

In 1983, the CBCI Commission for Justice, Development and Peace, which then included the health section, added the concept of struggle for a just society to the health mission by stating -

"The creative struggles of our people invite us to enter into critical collaboration with people of all religions, ideologies and agencies who strive after a just society. As a credible sign of this process the Church initiates action for justice within its own structures".

The Commission proposed the following priorities of work in the field of health :

1. To promote community health programmes on a priority basis
2. To train health care personnel with a bias towards rural health programmes and Christian values.

The recent statement of the CRI National Assembly (January 1992) is a very challenging document. After reflections on the national situation and the Church's social teaching, the major superiors of CRI renewed their commitment to liberation of the oppressed and to solidarity with the poor. They expressed specific concern for the "dehumanised dalits, the dispossessed tribals, the discrimination against women, marginalised ethnic and other minorities, enslaved bonded labourers and child labourers, degraded slum dwellers, unorganised agricultural, industrial and domestic workers, migrants and refugees".

They identified the following responses required of them :

— a new thrust for social justice in all areas of apostolate,

— to evaluate, reorient and prioritize ministries in consonance with the varied charisms, with redeployment and training of personnel and distribution of material resources accordingly,

— to show solidarity with people's movements,

— after discernment, issue based collaboration with other groups working for justice at all levels,

— to include the social teachings of the churches and suitable training in the formation programmes for religious, especially those specifically missioned to work for justice,

— to evolve a way of life that leads to a spirituality that is nurturing and supportive of action for justice programmes,

— and specifically for 1992 :

- to initiate community study and reflection on the social teachings of the church.
- organisation of training programmes for action for justice with a thrust to peoples' movement. The methodology will include exposure experience programmes for those missioned to the social apostolate, outreach programmes for those engaged in educational, medical, pastoral and evangelical apostolates.

The General Body Meeting of the CBCI in January 1992, has also encouraged the church in India in all its activities to focus specifically on dalits, unorganised labour and on women. A few excerpts from the summary of the main papers :

— "a forceful plea to stop discrimination against women, which seem to be embedded in the structure of our society. Many forms of discrimination in society and the church were listed, beginning even before the birth of the girl child, violence against women - physical, sexual and psychological, is a result of an inhuman and unchristian attitude".

— they also condemned unequivocally direct abortion — "another form of violence against the unborn and the destruction of human life".

— "agricultural labour in rural areas, domestic workers, construction workers and immigrant labour in cities form the bulk of the group of unorganised labour. Insecurity of work, inability to negotiate service conditions, absence of safety and retirement benefits are their lot".

— "the ideal parish/diocese is a community of believers where all sections of the people of God, gather in small groups, are involved in the planning, decision making and execution of various activities of the church. The leadership required in such a church is a non-dominating one, following the example of Jesus who came not to be served but to serve. Each diocesan region has planned such a participatory church".

These provide a new thrust and need to be considered seriously by all those engaged in the health-medical apostolate.

The CBCI Commission for Health Care Apostolate, in January 1992, has brought out a 'Health Policy of the Church in India - Guidelines', bringing together the thrusts and priorities evolving in recent years. It encompasses a wide range of topics - including theological foundations, spirituality and health, community health, mental and social health, areas of special concern, emergency services, special groups, rehabilitation, responsible parenthood, rational use of medicinal drugs and technology, care of the terminally ill, ethics, right to life and right to health among others.

This is an important document, offering guidelines to church related health work. Policy statements from this document are given in Part-C of this document.

A paper on "Health and Wholeness" which arose out of a long term study by the Christian Medical Commission of the World Council of Churches, provides the broader framework and the context in which the health apostolate of the 1990s should be located. It reflects on health as an issue of justice, of peace, of integrity of creation and of spirituality. It is a good background paper for study reflection and is also given in Part-C.

The life and teachings of Jesus and the teachings of the Church can thus be the "lamp to guide our feet" as we proceed in our life's journey as health workers. It is in this perspective that each of us can reflect on our role and that of our institution in the life and activity of CHAI.

"The spirit of the Lord is upon me, because he has anointed me to preach good news to the poor.

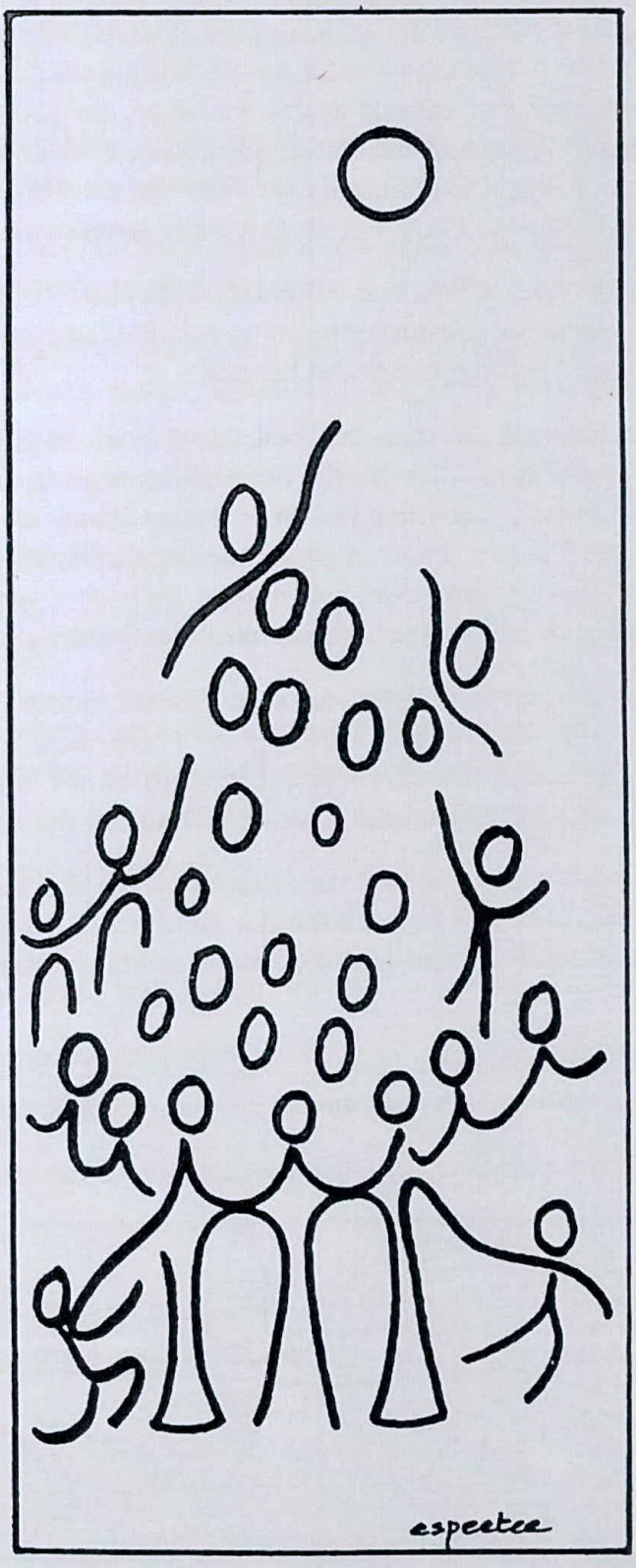
He has sent me to proclaim release to the captives, and recovering of sight to the blind, to set at liberty those who are oppressed, to proclaim the acceptable year of the Lord."……

And Jesus said "Today this scripture has been fulfilled in your hearing"……all in the synagogue were filled with wrath. And they rose up and put him out of the city".

Luke 4, 17-29

PART — B

IMPORTANT ISSUES FOR THE FUTURE OF CHAI



Introduction

CHAI and its constituent members have much to feel satisfied and proud about at this moment in their history. Looked at objectively,there is no doubt that significant contributions have been made in the provision of medical care and in the promotion of health of people in India. The most striking examples are in the areas of health of women and children, service in remote areas and with underprivileged groups, the training of women health personnel, the promotion of public health, community health, community organisation and the promotion of rational therapeutics, among others. Many newer areas are being actively explored by several members, for example wholistic health, use of alternative systems etc. There are several other areas of strength.

One of the purposes with which CHAI had initiated this evaluative study-reflection process, was to identify key issues that must be considered by the Board, the executives and the Association, as future strategies are planned for the nineties and beyond.

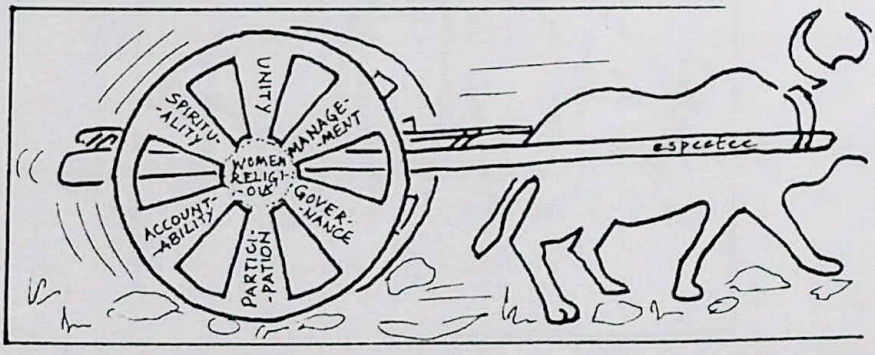
As has already been mentioned, the study has benefitted from the perspectives and views of different groups of people.Several areas identified by these different groups are similar and resonate with each other. This is particularly regarding health problems/issues that need to be addressed, types of strategies required etc. There is however greater divergence in the perceptions of different groups/members about CHAI. Each probably arises from their own particular experience and expectations. However, certain broad or predominant trends in thinking have emerged.

Issues being raised in this section, arise out of a fifteen month involvement in all the components of the CHAI study. Results that have come in have been considered. Gandhiji's talisman (see back page); faith reflections; an understanding of the role of medical care; an epidemiological approach; and a social analysis have all influenced the choice of issues raised.

The issues chosen are considered important for collective reflection and action. However, the data and information from the study will be available for all to make use of, and to arrive at their own issues. The specificities of local situations would be an important yardstick for choice of issues for discussion as well.

Like in a football game, some one has to kick off the start and that is what is being done through this document. The players in this case can determine the rules, as well as the direction of the game.

We hope that this will be a reflective, constructive and useful exercise.



1. Union is Strength

— exploring the potential of this 'union'

There is meaning even today,in the slogan under which Dr.Sr.Mary Glowery started CHAI, namely "Union is Strength", and also in the exhortation of Pope Pius XII "to organise the forces of good".

As individual institutions, a role can be played at the micro level. But it is only by coming together that a larger level role can be played.

The challenge before CHAI and its members today is to identify what this larger level role is and to equip itself adequately to play this role.

As a united body, members can reflect on issues and plan appropriate action (think globally). At the individual, local and micro levels they can implement these collective decisions (act locally).

Several questions can also be asked :

- **Has the association in the last fifty years fully explored the potential of this 'union' of members?**
- **Is there a need to be more united, organising the forces of good for the improved health of people, particularly the marginalised and impoverished ?**
- **How can we be more united?**
  - **— within institutions;**
  - **— with neighbouring members;**
  - **— within diocesan/State/regional units;**
  - **— with CHAI at the national level;**
  - **— with other voluntary organisations.**
- **Could building linkages with peoples' organisations and movements be considered?**
- **What will the objectives and nature of all the above types of linkages be? Among these where should our priorities lie?**
- **How can we monitor progress towards greater unity, better organisation and improved health? What would be the indicators of this process?**

2. What Does CHAI Mean to its Members?

During its early formative years CHAI was very much an association of professionals. All the issues taken up were professional ones, in the context of the Indian situation. Even the concern for ethics was for medical ethics. It was also clearly an 'Association' in its early years with no full timers. Its growth depended on the active contribution of members in its thinking process.

Its concepts of 'self' and 'the image' projected to members and others have since changed. On the one hand, there was the welcome addition of the social science stream in its thinking. There has also been a growth in the central organisation, with greater potential for responding to members needs, providing services etc. On the other hand, there has been a dilution in the involvement of members in its process of evolution. It has even developed some internal contradictions.

For instance, since the past two decades it also tends to play the role of a funding agency, or rather, more of a middle man role. The second highest expectation of members from CHAI is for financial assistance/medicines etc. There is no doubt that the financial needs fifty years ago were much greater, and sources of support more difficult to find. However, the foundresses did not form CHAI for this purpose, nor did members look to CHAI for this. Infact, they contributed from their own meagre funds for the running of the Association, its bulletin and activities without any external support. Nothing was subsidised.

Over the years, CHAI has also become institutionalized .This is potentially a positive phenomenon as any achievement requires good organisation. The image of CHAI is also becoming that of a large benevolent organisation offering security, material benefits and some services. Members play a relatively passive and dependent role vis-a-vis CHAI. Again, study findings indicate that several institutions join from a sense of duty because it is a Church organisation and because they hope to receive something, particularly material benefits from it. The sense of joining a common cause has waned. Whereas these needs may be legitimate, the prime purpose of CHAI has to be clarified.

However, right through its history, as seen in its resolutions, themes of conventions and activities, CHAI has also a core live element in it. This element has always sought to work towards the greater good. It has made relevant changes, and given birth to new ideas,initiatives and organisations. Contact with people through its members, has been a source of inspiration, strength and challenge. The profile of activities of members indicate the wide range of work involvements and the immense changes of approach taking place. These are the contradictions that are signs of great hope and promise.

A fundamental question: There is, therefore, need and scope today,for redefinition and clarity of the identity and meaning of CHAI, for its members.

- **Do members want CHAI to be : — a professional association with a social concern?**
  — a force working towards social change?
  — a charitable body?
  — a source of funds? or
  — an institution ?

- **Will members play an active role in determining and giving shape to this identity?**

The implications of the answers to these questions will need to be understood.

It is on this' conscious 'or unconscious fundamental image, that will depend, the direction that CHAI will take. It will also draw on this for its internal dynamism, the relationship with members and with other organisations and forces. Its contribution to society in India, will also evolve from this.

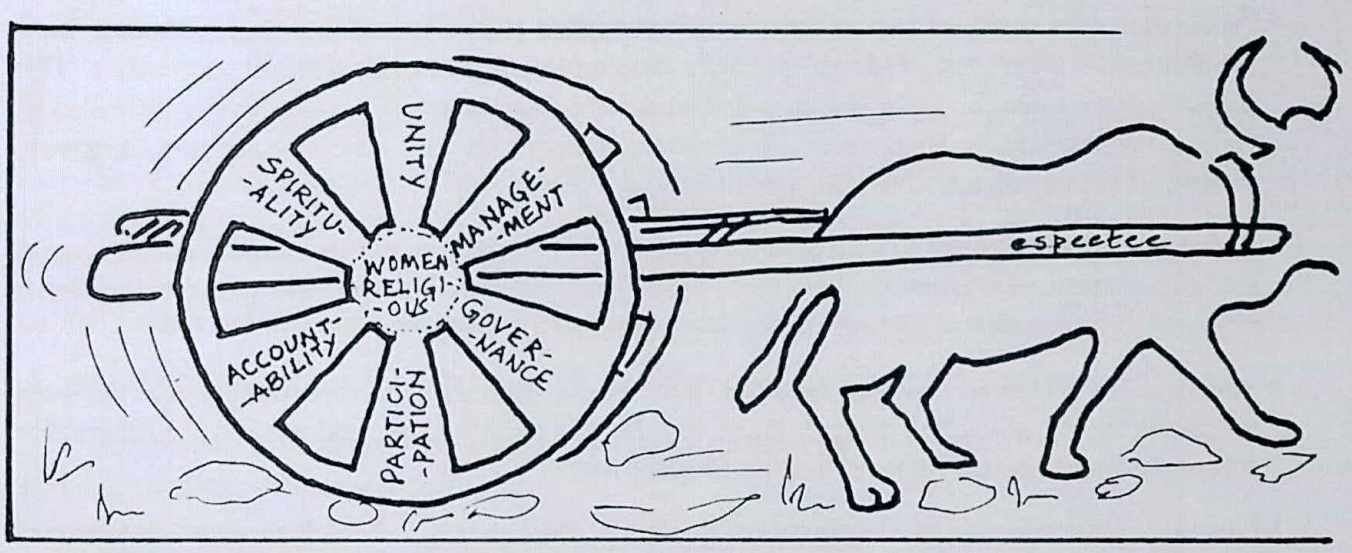
3. Redefining Philosophy, Goals and Objectives

Having completed fifty years of involvement in the health scene in India and arising from the previous two points;

- **Could CHAI have a brief current statement of its understanding about the health situation, the causes of disease and health in the country and the philosophical assumptions underlying the role that CHAI perceives for itself ?**
- **Do the goals and objectives need to be reframed?**
- **Do long and short term strategies need to be drawn?**
- **Could they be endorsed by members?**
- **How could the involvement and commitment of members to this be enhanced?**

Study findings reveal that there is a certain lack of clarity about goals and objectives among the members as well as the staff of CHAI.

- **How can we ensure that members, staff and office bearers of the Association are always aware of the objectives and priorities of the Association?**
- **How could we ensure that these are internalised by all concerned?**
- **Would a mission statement help?**



3A **Would you agree with the issues given below for the statement of philosophy? These have emerged from members and Delphi Panelists.**

- **Preferential option for the poor** — to promote health work in remote rural and backward areas, particularly of underdeveloped states, in urban slums, among tribal groups, marginalised groups, and indigent populations. Support of efforts by groups who bring the needs and issues of the poor to centre stage.
- **Justice dimensions of health/health work** and not only health care service issues - to support and build the organisational capacity of people, to demand a more just health and

social service system, and to act as a counterveiling power to the pharmaceutical industry and to vested interests.

- **Enabling/empowering people in health work** — to enable individuals to take care of their own health, to be able to analyse and respond to their problems themselves, to avoid everything that creates dependency and non-participation, to support a peoples' health movement, to enhance liberation and growth of people, to increase community responsibility for health work.

- **Holistic approach to health** — where there is harmony in body, mind and spirit, in society and with the environment. This is closely related to the spiritual dimension of health and is totally non-sectarian.

- **Community based non-institutional health work** — to demystify medical knowledge, to deprofessionalise as far as possible, to build on people's health knowledge and practices and to be sensitive to their culture. There is a need for greater focus on community health, but there is an important place for good institutional health care too.

- **Improved accessibility of the poor and underprivileged to medical and health care services** — to good quality basic health services and to life saving bio-medical services.

- Develop a **sense of understanding and caring among health workers** and in health institutions.

- Promotion of a **sense of community and belonging that are critical to wellbeing and wholeness** — by helping make people inter-dependant and concerned about each other. The primary responsibility for health care lies within the community itself and within families to take care of each other. Hence creating healthy communities - that receives, accepts, forgives, heals and commissions is of the highest priority.

- **Spiritual dimensions of health and healing** — which is intricately linked to wholeness and a wholistic approach to health. Several of the points raised earlier relate to a spirituality which strives to make a dehumanised situation more human.

- The need to **focus on members of the health care team,** in its broadest sense, to help maintain their motivation, nurture those involved in health work, and to provide means for fellowship and mutual support among themselves.

- **Gender related issues** — womens' health status, their access to health care and the impact of technology on women.

- **Enviromental/ecological issues as they relate to health.**

- **Strengthening of self-reliance at all levels** — by promoting herbal and home remedies, nondrug therapies, low cost care and appropriate health technology. And reduction of dependence on drugs and the medical industry.

- **Integrated approach to medicine and health** — studying, understanding and using Indian and other systems of medicine, namely Ayurveda, Siddha, Unani, Homeopathy, Acupuncture etc., and local health practices and remedies.

4. Clarification of Current Role

CHAI functions today in the midst of several groupings. A representation of the groups in health/related sectors at the national level is as follows:

CNGI	**Central and State**	CBCI Commission for
IFCMG	**Government Bodies**	Health Care Apostolate
NFPAI		CRI
ISNFP		
FIAMCO Biomedical		SJMC &H (CBCI Society
Ethics Centre		for Medical Education)
Professional		CMAI
Associations	**CHAI**	VHAI
IMA		CSI Ministry of Healing
IHA		LSPSS
TNAI		AIDAN
IGSSS		ACHAN
ISI	FUNDAGS	mfc

N.B.

CRI	—	Conference of Religious of India	SJMC & H	—	St.John's Medical College and Hospital
VHAI	—	Voluntary Health Association of India	CMAI	—	Christian Medical Association of India
CSI	—	Church of South India	AIDAN	—	All India Drug Action Network
LSPSS	—	Lok Swasthya Parampara Samvardan Samiti	CNGI	—	Catholic Nurses Guild of India
IFCMG	—	Indian Federation of Catholic Medical Guilds	NFPAI	—	Natural Family Planning Association of India
ISNFP	—	Indian Society for Natural Family Planning	TNAI	—	Trained Nurses' Association of India
IMA	—	Indian Medical Association	IHA	—	Indian Hospital Association
ISI	—	Indian Social Institute	MFC	—	Medico Friend Circle
IGSSS	—	Indo-German Social Service Society	ACHAN	—	Asian Community Health Action Network

Several times during its history, CHAI has shown a flexibility in taking up issues that it considered important, and after some time it handed over the job to the other organisations or withdrew when the role was taken care of by others.Thus, it has been a true catalyst.

In the context of all these factors,

- **what should be the role that CHAI should play during the nineties and beyond?**

Regional, State and diocesan units may also need to identify their own specific roles in the context of their own situation.

Health is a State subject and different State governments differ in their level of functioning. NGOs or voluntary organisations are also more active in some States than in others.

- **Could the resources available in terms of facilities for training and continuing education, along with other aspects be studied,in the voluntary/government sector in each state?**

The skills, local knowledge and practices, peoples' organisations and other strengths of the communities within which institutions are located need to be identified. This peoples' sector is most often ignored.

- **How could we learn and link more with this sector?**

5. Diverse Membership Needs Call for Different Strategies

When exploring future strategies, the reality of the present day membership of CHAI, its composition and their activities is an important factor to be considered.

As seen in the profile of CHAI membership - 1992, there is a great diversity of membership which is a tremendous strength for the Association. However, it is obvious that the circumstances, needs and the institutional objectives of these different groups of members differ. Different strategies would need to be evolved for these diverse needs.

A substantial proportion of members are small health centres. Many of these are run by one or two trained persons, most often nurses. They often have to handle problems - medical and non-medical, that their training in bedside nursing may have not prepared them. The present programmes and activities of CHAI and also future strategies would have to consider the special needs of this group.

- **In our own region/State/diocese,what are the needs of these members? How can CHAI help? What are the other resources/facilities available? Can we plan for the next three years?**

Similarly the medium sized hospitals and their personnel have special needs. And so also do the larger hospitals.

- **What are the needs of this group ? How can they be met and by whom?**

A small number of social welfare organisations, social service societies and community health projects are members. They could play a very useful role. They are a constant reminder that other approaches that impinge on health, exist and are necessary.

- **Are they on the perifery of the Association?**
- **Can a creative dialogue between the different groups in the association be fostered?**

Several issues related to members have been tackled by CHAI for example supply of CMMB medicines, equipment, etc., through CPS, promotion of pastoral care, medical ethics, rational therapeutics, management, urban health, extension work and community health. Issues concerning accountability have been raised.

- **Are these adequate? Are these being appropriately utilised by members? What more is needed?**

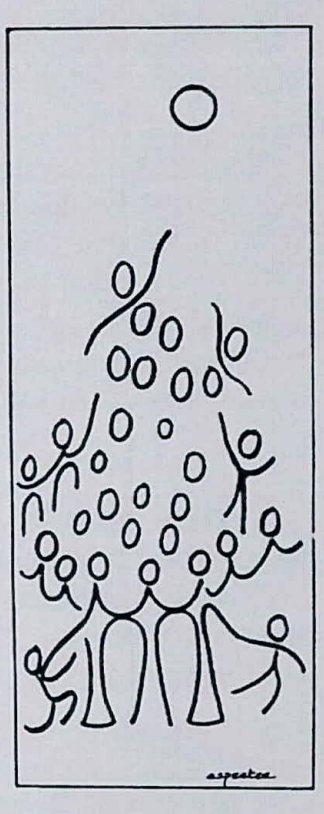
Different strategies to serve the needs of the broad groupings of members need to be evolved

- **Should this be done only by the CHAI office? What can be the inputs of the Board, the regional units and all members in this?**

Everyone has something to offer — a perspective, a skill, an experience, an approach,

- **Can these be identified, made known and harnessed?**

6. Need for Decentralisation and Democratisation



For an Association as large and varied as CHAI and functioning in a country as vast as India, it is necessary to have greater decentralisation of power and responsibilities, greater democratisation and leadership from among the members.

Very few members today see CHAI as being their creation, their Association which they need to build by contributing much more than an annual subscription. The relationship of dependance and apathy regarding its functioning is such that one cannot then have great expectations from CHAI or its members. In this situation, the headquarters too can develop a patronising and patriarchal attitude towards members - worrying about them, trying to keep them in line, bemoaning the fact that they do not have enough control over them, etc.

If a meaningful role is sought to be played collectively as an Association then much greater effort needs to be put into the internal dynamics and mechanisms of functioning of the Association.

Despite the fact that provision for regional units was made at its inception , and more definite efforts and resolutions made since its Silver Jubilee, this vital aspect of having vibrant and alive Regional/State or Diocesan level units has not materialised in a sustained way. Barring a few exceptions, the attempts have usually succumbed to 'underfive' mortality.

- **How can members be encouraged to take leadership and responsibility?**
- **How could the Centre support such a process of decentralisation/democratisation?**
- **What are the democratic norms and structures that need to be consciously nurtured?**

7. Women Religious — the Backbone of CHAI

The most striking aspect of the CHAI history is that the main participants and players have been women and therefore the history could more aptly be called 'her story'.

Situated in the the patriarchal, hierarchical, and semi-feudal society of India in the 1940s, this is an interesting phenomenon. The foundresses and early pioneers were,however, primarily expatriate medical professionals, mainly nurses and some doctors and pharmacists. The vision and persuasive powers of the key figures, Sr.Dr.Mary Glowery,JMJ (Sister Mary of the Sacred Heart) with the organisational abilities of Mother Kinesberg, FMM and the enthusiasm of fifteen to twenty sisters, saw CHAI safely through its early years.

These sisters thought boldly, far ahead of their times both in the medical and nursing field, as well as in the thinking of the Church. Like risk-taking modern entrepreneurs they set up institutions and training centres for health personnel and ran them efficiently, often relying heavily on faith and the Great Unknown.The key characterstics of the pioneers was that they assumed leadership with confidence and skill.

Over the years, though members have increased enormously in numbers, this characterstic of women religous confidently taking initiatives, seems to be decreasing at the national level. While sisters continue to function very effectively in their own congregations and in their institutions there seem to be difficulties in taking up larger level responsibilities in CHAI.

Even as members of CHAI, their participation in decision and policy making and in several other aspects is rather passive. Several are highly qualified, more so than the early pioneers, and they still are the ones working in the field.

One hears of domestication of women within the Church being reflective also of Indian society, thus explaining the takeover by the clergy. These aspects need to be discussed. They would probably raise issues that are pertinent not only to CHAI but to the wider framework within which they function.

- **Has initiative and leadership of women religious in CHAI gone down in recent decades? If so,what are the reasons?**

- **How can initiatives and confidence among the women religious be further fostered so that they may play their rightful role at the national level?**

8. Building Better Interaction Between CHAI and its Members.

A significant proportion of members stated that the strength of CHAI was its support, concern for and service to its members. This speaks well for the Association. The other side of the coin is that a large number of members also considered the interaction with members as CHAI's greatest weakness! Mentioned were - lack of a personal contact and lack of understanding of their needs, among many others.

Good or bad, the overall impression is that the relationship between members and CHAI has emerged as an important issue. There is need to build closer, supportive linkages between members. Doing this in smaller geographical regions and around areas of special interests are two possibilities.

Feelings of isolation, loneliness and tensions of work by members especially in smaller institutions/ remote areas have been expressed. Building of circles of interaction and the feeling of a community of like-minded people will go a long way in overcoming this, even if they are ten to hundred kilometres apart. Each member could think of what they can do to support at least five others. 'From each one according to their capacity and to each one according to their need'.

CHAI too needs to give the highest priority to building up close interactions with its members. With growth in numbers and in an institutionalized (computerised!) age, some of this has been lost. A strengthened motivated membership may be its greatest asset in the future.

- **How can all of us contribute to an enriching relationship between CHAI and its members; and between members, locally and regionally?**

9. Need for an Active and Able Governance

If CHAI has to retain and strengthen its nature of being a membership organisation - along with greater decentralisation, democratisation, better linkaging and contact, it also needs an actively interested Board that can keep in touch with what is happening in the membership, and also be able to give direction at a national level. It may be necessary to have representation of regional areas and types of institution so that the special circumstances and needs of these areas/institutions are not ignored. It is through involvement in national/regional level issues, meetings and programmes that Board members can also be strengthened and continue to grow.

- **Besides staff of CHAI, could the Board members also be involved/participate in national/ regional level meetings/ other programmes?**

The persons taking up such responsibilities should be made aware of the involvement in terms of time and effort that such a position demands. It would also mean that their involvement in their own institution would be much less.

The manner of elections also needs to be carefully considered. At present participants for Annual Conventions are predominantly from large institutions and those geographically close to the venue of the convention. There is also a tremendous rotation among the personnel from institutions who attend the convention. Often the participants hardly know much about CHAI.

- **Is change necessary? What are the possible methods to bring about this?**
- **Can election proceedings be less arbitrary and more serious?**

If CHAI is raising critical issues about governance in the context of the government and its health services and regarding the style of functioning of the Church, it would be a good and healthy exercise to make all efforts to activate, revitalise the participatory democratic functioning of the Association itself.

- **How can each member institution/regional unit help towards this ?**

10. Some Thoughts regarding Membership

The membership of CHAI is institutional. However, it is persons within institutions who have visions, dreams, dynamism and competence. It is they who give the institutions character and who build relationships with other organisations and institutions. Persons in institutions change, so does their interaction and relationship with CHAI.

- **What are the possible ways by which CHAI can maintain a link with persons and grow from this interaction?**

Historically there has been provision for associate membership of individuals. This was for sisters working in government hospitals, superiors and chaplains who were interested and for lay people. They have no voting rights.

- **What role can they play? Should associate membership be dropped or made more active and useful? What could be the advantages and disadvantages?**

The issue of encouraging lay membership has also been raised off and on. At one stage there was provision for non-catholic institutions to be given special membership on the discretion of the Board. With the formation of VHAI, which took place later, this was dropped.

Among regular members there are instances where infirmaries serving the needs of small institutions, for example of religious and perhaps with a few orphans/old people are made members. A clause/resolution in early years mentioned that only those groups which provided services that were open to the general public could be admitted as members of CHAI.

- **What should be the present position?**

Opening membership to Diocesan Social Service Societies does seem a welcome move.

- **What efforts are required to identify their specific needs; to integrate their perspectives into the Association and to expose and involve them to thinking of health, particularly regarding the newer thrusts?**

Most associations are social groupings that have certain norms of practice that are commonly agreed upon, which bind the members together.

- **Can we discuss what these could be for CHAI?**

Therefore:

- **Is there a need to review membership?**
- **What should the criteria be when enrolling new members?**
- **Should there be an accreditation process (different for different types of members) so that members can reflect on their strengths and weaknesses and make improvements?**

11. Communication Links Between Members

A very vital aspect of keeping an association and its spirit alive is communication and linkaging between members. At this present moment there is no such mechanism functioning in CHAI. Its in-house journal, Medical Service, besides being a medium for updates in technical information, had a very key role in the past of keeping members informed about each others' activities. While this aspect was not very strong and infact waxed and waned, it could have been strengthened creatively. Its metamorphosis into 'Health Action' has resulted in the loss of inhouse communication since the new version is focussed on a wider circle of readers,not only members. The continuing education aspect of'Health Action' has however received wide appreciation from its members.Only 800 (34.8%) of members currently subscribe to the journal.

- **Could Health Action be sent to all members such that the subscription is part of the membership fee?**
- **How could Health Action be an effective communication link between members?**
- **How could members participate in the preparation of the magazine?**
- **How could it become a members forum for exchange of ideas and debating of views?**
- **What other creative methods should be evolved to further 'networking' among members?**

12. Internal Mechanisms of Functioning

CHAI head office has gone through a phase of rapid expansion and change in recent years. Many new services are offered and projects taken up alongside earlier commitments. The small team of ten to fifteen people has grown to over sixty. Growing pains are part of the process ! These have been evident especially with the large and difficult challenges that CHAI has been taking up during the past decade.

Lack of clarity regarding goals and objectives, high turnover of staff, levels of confusion regarding roles, inadequate understanding and inter-relationship between Departments, and other factors brought out by the staff indicate that there is need for serious ongoing work on this area.

- **How could the common cause for which all the staff, Board and members are working towards as one team be internalised and reinforced ?**
- **How could morale and motivation be kept up ?**
- **Is the time now ripe for a family style of functioning to give way to some of the concepts emerging from management and behavioural sciences ?**
- **Besides improved staff selection, what methods of human resource development can be used?**
- **What internal methods of checks and balances can CHAI adopt for itself ?**
- **How can the membership and the Board help, support, strengthen and challenge this important process?**
- **Can we all participate in problem solving ?**

13. Accountability

That Accountability is important is accepted by all. Several specific questions regarding accountability can be best answered by those actually involved.

For instance,

- **What is the accountability of CHAI ?**
  - **to its members; to its founders; to the people; to its own goals and vision.**
- **How does one gauge levels of accountability?**
- **Could the yardstick of accountability to the least and the last and therefore to the public, be kept as a goal?**

This was the concept of trusteeship that Gandhi talked about.

Management of funds and accounts is a crucial issue, linked to accountability. The external financial expert has indicated the need for improved financial planning and management and greater financial discipline. Mismanagement of funds in two State CHA units has been reported. An internal audit system has been introduced.

Other aspects impinging on accountability such as living out its objectives and vision in all its activities and in its internal functioning, quality and efficiency of service etc., have been raised.

- **As its trustees, what are the methods by which members can support and safeguard CHAI in this vital area as it works towards its goals?**
- **How can each one in the CHAI office feel more responsible, for the large amounts of money and property being kept in their charge for the cause of betterment of health of poor people?**
- **How can each one give their best even if there were none to see and none to applaud?**

14. Lag Period Between Ideas and Action

It has often occured during CHAI's history that the lag period or period of gestation between the genesis of an idea and its actualisation takes upto one or two decades. This is understandable for the more complex undertakings especially in the early years. Study findings indicate for instance that the follow up of the conventions and their resolutions even today by members is dismal. How many remember the ten point priorities drawn up in 1983 to be worked on during the next decade? This raises important questions as to how serious members are about their Association or about the annual conventions.

- **What factors have been contributing to this lag time? or what are the reasons for the delay?**
- **What methods/strategies need to be evolved to enhance the spread of collective resolutions and decisions and their translation into membership action at individual and institutional level?**

Those who bear the consequences of delay and inaction are the people and it is in their name most often that funds are received.

An association like CHAI involved in Health and Development needs to experiment with innovative ideas.

- **Could/should CHAI have one or more cells or groups:**
  - **— to function as an innovative/creative group?**
  - **— to work out the feasibility of putting ideas into action?**
  - **— to follow up and monitor progress towards the realisation of these ideas?**

15. Linking with Church Structures

CHAI and its members are integral parts of the involvement of the Catholic Church and the Catholic community in the field of health in India.

Close and cordial dialogue and links need to be maintained between CHAI and Church structures. This has been expressed by different sectors of people within the study. This is particularly needed with CBCI and its related commissions, with the CRI and with superiors of congregations. This is a role best done by the national office and perhaps also by the regional/ Diocesan units. One person in the CHAI Board in the distant past had the specific responsiblity of liaison work with the CRI and CBCI. CHAI also had an ecclesiastical advisor from CBCI.

- **What would be the most appropriate form of linkage with the Church today?**

It has been suggested that CHAI and its members could play a more active part in creating an awareness among the Catholic community of believers on health issues. They in turn could be encouraged/enabled to play their role in society, in the wider communities among whom they live and work. This could be done through parishes, schools, and colleges. This would also increase the involvement and support of the communities to CHAI member hospitals and dispensaries in their area.

- **What are the possibilities that can be explored to build such 'community capability'?***

* A term borrowed from the CSI Ministry of Healing.

16. Need to Further Explore the Theology and Spirituality of Health and Healing

Given that the main motivation of the members of CHAI and the personnel working in them is a vocation that has its roots in spirituality and religion, it seems necessary that the area mentioned in the title above needs deeper reflection.

The work done by most member institutions is primarily in the physical, biological and medical domain. Some have moved into the social aspects and fewer into the psychological and perhaps a still smaller number into the socio-political aspects. However important each of these are, there is a need for greater interaction between all dimensions and also a greater search for an understanding of the deeper, spiritual aspects of health which may have to do with all the dimensions mentioned above. Locating this within the spiritual heritage of our own country and in the context of the pluralistic society in which we live would be an additional challenge and source of inspiration.

- **How could the invaluable field level experiences of CHAI members play an important role in further developing this concept?**

CHAI has in the past dealt with medical ethics and pastoral care. These too have been the efforts of very few committed individuals and in themselves need much strengthening and much greater support.

17. Crisis in Values

It is not surprising that events in Indian society in general are also reflected in the microworlds of the members. Unethical medical practices take place due to the need for financial survival, for instance overinvestigating, unnecessary stay in hospital, payment of very high salaries to doctors and specialists, sometimes "under-the-table", dependence on the "cheap labour" of religious nurses and lay paramedicals, unhealthy competition between health institutions, second grade treatment to personnel working in small health centres compared to those in hospitals, treating sick people as cases or patients rather than as persons, corruption in administration - the list goes on. These occur in a relatively smaller percentage of member institutions now. However, given the medicare trends in the country and the market forces operating, many institutions in the future would face a financial crisis. Serious note needs to be taken of these at a policy level. These are plain and simple unethical practices in a very secular sense and mitigate against human dignity. There is no point in talking about Christian values when these basic values are disappearing. It may be necessary to take bold actions in raising these issues for membership debate and/or also to close down institutions if necessary. They do not have to continue as a prestige issue or an employment or income generating project. Perhaps the calling and the message is to die to oneself and move on to newer challenges/ areas after due study, reflection and discernment.

Promotion and upholding of ethical values were considered very important from the beginning.

- **How can we ensure that ethical norms are upheld in all our activities and dealings?**

18. Marginalisation from the Mainstream

With the rapid growth in the government, private and NGO sector in health care as well as the increasing recognition given to the existing traditional sector in health care there is a slow process of marginalisation of the services of the Church related sector. This is manifesting itself in different ways namely, increasing difficulty to survive economically, and poor utilisation of services. The situation is ofcourse very uneven in different parts of the country. The scenario mentioned above is most apparent in the South, in more developed areas in Kerala and in urbanised areas including smaller towns. It is not unlikely that this would be the trend in other areas also in the next ten to twenty years. Given that there is a scarcity of resources and personnel, it is important to identify areas of priority and make a substantial and consistent effort in those directions. Much more active linkages, contact and presence needs to be made in the existing sectors, especially the Government and peoples' sector, so that it need not be said that the leaven is too far removed from the bread.

- **Into what areas can CHAI, its units and member institutions pioneer in the field of health intervention in the future?**

19. Community Health and Development and Other Training

This has been identified both by CHAI members and staff as a priority area for work in the future. Focus on rural and tribal areas has also been identified by members as the most important areas to be considered by CHAI in its future work. A smaller number of members and Delphi panelists felt that health work among urban poor communities was also important.

Larger institutions have a very important supportive role in this with possibilities of intervening in several ways, namely.,

— being referral centres for patients from smaller centres.

— sending staff on a regular basis to provide curative and other services to the smaller centres.

— organising/supporting training programmes for health workers from the field.

— getting involved with poor communities situated around them, especially with the urban poor.

— liaison with government authorities.

— if there are several other similar facilities around them moving into newer areas like rehabilitation, deaddiction and detoxification (drug and alcoholism treatment), involvement in school health, mental health etc. The possibilities are endless.

It has been raised by Delphi panelists that provision of good quality, humane medical care to the poor when they most need it is an important role. With rising costs, what was available in the past to this group, is moving away from their reach. An analysis of the pattern of utilization of services would show who benefits the most from our services.

CHAI membership comprises primarily of small, rural/tribal based health centres. These need to be reached in an effective way by CHAI. The needs for training and support will have to be met at regional/diocesan levels to be better utilised. It is this group who probably need it most, who make least use of the various services of CHAI. Their participation in programmes offered is also the lowest. When the CHA nursing board was closed, an advisory educational council was set up, which did not last long. Need for guidance, support and training has been voiced as a major requirement and expectation of members. Several areas need to be covered — medical and nursing updates, community health approaches, information about government health policies, legal aid, medical ethics and pastoral care, community organisation and methods of health education.

- **Is there a need for CHAI to have an Educational Council today? What could be its scope and functions?**
- **In what special areas can members offer their experience/ expertise to CHAI as resource for :**
  - **a) Diocesan,**
  - **b) State/Regional, and**
  - **c) National level training programmes, workshops or seminars?**

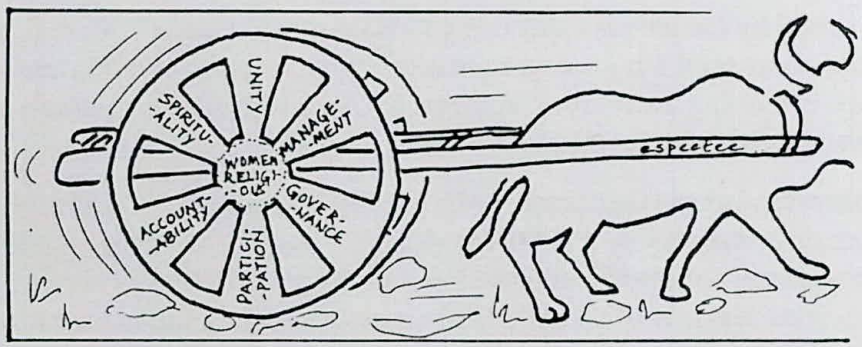
20. Health Education and Health Awareness

This was another area identified by members as being one of the future thrusts of CHAI. CHAI has a relatively new unit on low cost media. HAFA brings out Health Action and other publications. Other media groups in the country also conduct training programmes in low cost communications and other groups publish health journals and newsletters.

- **What are the creative ways by which CHAI and its members can work on this?**
- **What are the major local and larger issues that need to be taken up for health education and awareness? What are the resources that can be tapped from government and other NGOs for this?**
- **Can we make use of the large number of educational institutions — nonformal education programmes, schools and colleges — run by Church related groups for this?**

Let us build linkages with those in our locality and introduce health concepts. Some groups have done this effectively with corporation and government schools.

There has been a plea from several members, for CHAI to produce health education materials and other publications in local languages. This can be done in dialogue with VHAI and other groups who undertake such work.



In conclusion,

It is good to remember the thoughts of another CHAI visionary, Fr. James Tong, SJ, who was the Executive Director of CHAI for 17 long years. He used to say that "one should seize the opportunity of the moment and act". Because such a chance may not be ours again. Better health for the families of India, particularly the poor, and the `sister by the hurricane lamp' were those towards whom the actions envisaged by him were geared.

CHAI has been very fortunate to have had visionary leadership and committed membership down the years. That is how every crisis, not that there were not any (!) were overcome.

We are confident that the best use will be made of the Golden Jubilee Year to seek the signs of the times, renew vision, look ahead and act.

PART — C

THE NATIONAL HEALTH SITUATION

A Compilation of Statistics

The Need to Contextualise

CHAI and its constituent members contribute to medical care and health promotion in India. They are one of several sectors in the country that endeavour to do so. Ever since Independence,the Government or State sector in this area has grown tremendously. So too has the private sector. CHAI forms part of the third sector - the voluntary health sector- in this country. Included in this sector are a wide range of secular charitable trusts and registered societies, apart from other CHAI type religious groupings including Protestant and Orthodox Christian Church institutions,Gandhian institutions, Ramakrishna Mission and others. Practitioners and institutions of the traditional/indigenous medicine groups,also form part of this sector,though they can be considered to be also part of the 'people's sector', since people have greater control over the health knowledge,and practices of these systems.

It is also widely agreed today that the health status of people is closely linked to the inter-relationship of complex factors. These factors operate in society,in rural and urban communities,in families,within individual persons and also in the environment in which people live.

Individual persons especially those impoverished and marginalised have minimal control over several important factors that determine their health. Poverty,low purchasing capacity,poor nutrition,insanitary conditions, inadequate, overcrowded housing,lack of potable water supply,lack of access to education and lack of awareness — all contribute to a vicious cycle in which health becomes a casualty. Unemployment,underemployment and hazards at the working place,particularly for the unorganised sector,compound the problems. They pay a heavy toll in terms of infant and underfive deaths,maternal deaths,high sickness rates,lowered life expectancy and poor quality of life.

When thinking about the future role of CHAI in India and the possible contribution of each member, it is important to be rooted in reality and to be aware of the health situation both at the macro or national level and at the micro level. Since resources of personnel,money and infrastructure are relatively limited,it is important to be able to identify areas of priority, in keeping with CHAI's convictions,beliefs and to work in a consistent manner in those areas.

The Situation of Health and Disease in India

a. Life Expectancy

The life expectancy or longevity at birth at the national level has gone up from 32.45 years for males and 31.66 years for females in 1951,to 58.10 years and 59.10 years for males and females respectively, in 1988. In 1990 the combined life expectancy was 59 years (2)

The life expectancy of people in developed countries and also in some developing countries today is between 70 to 80 years. This is probably already the case among the upper class of India today.

b. Infant Mortality Rate (IMR)

The infant mortality rate is the death rate of children below the age of 12 months, per 1000 live births,per mid year estimated population. It is widely accepted as being a sensitive indicator of the health

status and level of living of a population. It also reflects the quality of the health service system of an area or country.

In 1985,the IMR for India as a whole was 106 per 1000 live births. The goal set in the National Health Policy (of 1982),was that by 2000 A.D.the IMR should decrease to 60 per 1000 live births.

Provisional estimates from the Sample Registration System in 1990 (Table 1 & 2) indicate inter-state differences. Within States there are very big differences between urban and rural areas. If it was possible to analyse IMR by sex and social class, we would also see further disparities between females and males and between the upper,middle and lower socio-economic groups.

Table — 1

Health Status in 1990 : Regional Differences

State	Birth Rate	Death Rate	IMR
Andhra Pradesh	25.6	8.7	70
Assam	27.5	9.7	77
Bihar	32.9	10.6	75
Gujarat	29.5	8.9	72
Haryana	31.8	8.5	69
Himachal Pradesh	27.0	8.4	68
Jammu and Kashmir	31.4	7.9	70
Karnataka	27.8	8.1	71
Kerala	19.0	5.9	17
Madhya Pradesh	36.0	12.5	111
Maharashtra	27.5	7.5	58
Orissa	29.9	11.6	123
Punjab	27.6	7.3	55
Rajasthan	33.1	9.4	83
Tamilnadu	22.4	8.7	67
Uttar Pradesh	35.7	12.0	98
West Bengal	27.3	8.1	63

Source: 5

Table — 2

Health Status in 1990 : Rural-Urban Differences

State	Birth Rate		Death Rate		IMR	
	Rural	Urban	Rural	Urban	Rural	Urban
Andhra Pradesh	25.9	24.4	9.4	6.3	73	56
Assam	28.1	20.7	9.9	6.9	79	43
Bihar	33.8	24.6	11.0	6.2	77	46
Gujarat	30.0	28.2	9.6	7.2	79	54
Haryana	33.0	27.5	8.9	6.9	73	52

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Himachal Pradesh	27.6	19.2	8.5	6.9	71	42
Jammu & Kashmir	33.3	24.1	8.3	6.3	73	52
Karnataka	28.8	24.8	8.8	6.1	81	39
Kerala	19.0	19.3	5.9	5.8	18	16
Madhya Pradesh	38.7	29.1	13.6	7.5	119	61
Maharashtra	29.5	23.6	8.4	5.2	64	44
Orissa	30.6	23.6	12.2	6.7	127	68
Punjab	28.4	25.6	8.5	5.8	58	45
Rajasthan	34.3	27.6	9.9	7.5	88	60
Tamilnadu	23.2	20.9	10.6	6.4	81	38
Uttar Pradesh	37.2	29.3	12.8	8.8	104	67
West Bengal	30.7	18.3	8.6	6.0	64	42

Source: 5

c. Crude Death Rates (CDR)

The Crude Death Rate is the number of deaths per 1000 population per year.

Table — 3

CDR-Three Year Moving Averages during 1971-1988

State	Rural			Urban		
	1971-73	1978-80	1986-88	1971-73	1978-80	1986-88
Uttar Pradesh	22.9	18.6	15.1	13.6	11.5	9.3
Madhya Pradesh	18.1	16.3	14.9	10.9	9.3	9.8
Assam	18.1	12.1	12.3	9.7	7.2	7.8
Gujarat	17.0	13.5	11.3	11.9	10.1	8.4
Haryana	11.9	12.4	9.7	8.3	8.3	7.0
Andhra Pradesh	17.0	13.5	10.7	10.3	7.9	7.2
Karnataka	14.2	12.0	9.5	7.9	7.1	6.6
Kerala	9.1	7.0	6.1	7.8	6.6	6.6
INDIA	17.4	14.2	12.0	9.9	8.6	7.5

Source: 4

Table 3 shows a continuous decline of death rate over the years. However,rural death rates are much higher than urban. Differences in the various states are also obvious. In 1989,the SRS (Sample Registration Scheme of Government of India) estimated the all-India death rate as 10.3. The National Health Policy goal is to reduce this to 9 per 1000 by 2000 A.D.

d. Gender Differences in Infant Mortality Rate (IMR) and in Crude Death Rate (CDR)

In Uttar Pradesh,Himachal Pradesh and Punjab the Infant Mortality Rate is higher among girls, than boys. In Bihar, Rajasthan, Madhya Pradesh, Tamilnadu, Gujarat and Maharashtra the Infant Mortality Rates are fairly similar for girls and boys,though in the first three States,the overall rates are considerably higher than the national average. In the remaining states of India the Infant Mortality Rate in girls is lower than in boys. This data pertains to 1985.

e. Maternal Mortality Rate

The estimated Maternal Mortality Rate per 1000 live births in rural India for 1987 was as follows:

Table — 4

Maternal Mortality Rate in 1987

State	Maternal Mortality Rate	State	Maternal Mortality Rate
INDIA	3.6	Gujarat	2.7
Uttar Pradesh	7.1	Andhra Pradesh	2.0
Himachal Pradesh	6.6	Maharashtra	1.9
Bihar	6.1	Tamilnadu	1.8
Madhya Pradesh	6.1	Jammu & Kashmir	1.5
Rajasthan	4.6	Karnataka	1.0
Orissa	4.3	Punjab	0.6
Haryana	4.0	Kerala	negligible

Source: 4

Tremendous disparities are evident. These rates are unacceptably high.

f. Sex Ratio over the Decades

The sex ratio is the number of females per 1000 males.

Year	Number /1000
1901	972
1921	955
1941	745
1961	941
1981	934
1991	929

Source: 1

In most countries the number of females in a population is more than the number of males,that is, the sex ratio is positive and would be 1002-1005. In India as seen in the table above, the ratio is negative and what is more alarming is that it is declining over the decades.

However,there are certain States and regions in India where the sex ratio is positive even today. These are Kerala,Goa,Dakshina Kannada district ofKarnataka,theNorth Eastern States and tribal regions of Central India and Orissa.

g. Nutritional Status

Change in under nutrition during 1975 to 1989 in rural Indian children in the one to five year group was as follows:

Table — 5

Nutritional Status of Rural Children Below 5 Years in 1979 and 1989

State	Year	Boys		Girls	
		Moderate	Severe	Moderate	Severe
Kerala	1975	61.2	14.3	46.0	17.4
	1989	55.0	3.3	34.4	2.2
Tamilnadu	1975	53.8	12.1	48.6	20.2
	1989	43.5	5.8	48.7	4.8

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Maharashtra	1975	57.5	29.9	47.0	32.0
	1989	58.8	8.4	50.3	9.1
Orissa	1975	46.2	11.4	51.0	15.0
	1989	54.7	12.6	61.7	14.0

Source: 4

Other indicators of nutrition of women and children in India are given in the table below.

Table — 6

Other Indicators of Nutrition in India and in Developed Countries

	Indicator	India	Developing countries	Developed countries
01.	Percentage of new borns weighing less than 2.5 Kgs	27.5	18.0	9.0
02.	Percentage of anemia among pregnant women	70.0	60.0	20.0

Source: 6

Data for 1990 show that the percentage of new borns with a birth weight of less than 2,500 gms is 30.0%. The two tables above indicate that the problem of undernutrition still remains a cause of serious concern.

h. Growth of the Population of India During this Century

YEAR	Population (in millions)
1901	238.4
1921	251.3
1941	318.6
1961	439.2
1981	685.1
1991	884.0

Source: 7

The population of India has more than doubled since independence.

We add 16 million persons to our population every year, which is roughly equivalent to the entire population of Australia.

i. National Health Policy Goals and Achievements

Table — 7

National Health Policy Goals and Achievements as of 1990 (provisional)

	Goals	Achievement
● Infant mortality rate (per 1000 live births)(combined)	60	80 (1900 prov)
● Under five mortality (per 1000 live births)	70	146 (1990)
● Maternal mortality (per lakh births)	200	400 (1990)
● Perinatal Mortality	30-35	50.1 (1987)
● Crude Death Rate (combined)	9/1000	9.6 (1990 prov)
● Crude Birth Rate (combined)	21/1000	29.9 (1990 prov)
● Effective CPR (Couple Protection Rate)	60.0%	44.1%(1991 prov)
● N.R.R. (Net Reproduction Rate)	1.0	1.6 (1981)

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● Family size (Rural & Urban combined)	2.3	4.1 (1987)
● % of Newborn with 2,500 gms birth weight	10%	30% (1990)
● % of Antenatal Care	100%	40.50%
● % of Deliveries by TBA (Trained Birth Attendants)	100%	40.50% (1987)
● Immunization TT (PW)	100%	79% (1991)
TT School Children	100%	56.6% (1989)
DPT	100%	82% (1990)
Polio	100%	82% (1990)
BCG	100%	89% (1990)
DT	85%	80% (1990)
● Measles	100%	90.1% (1991)
● Life Expectancy at Birth (persons)	64.0	59.0 (1990)
● Leprosy (% of Disease arrested out of those arrested)	100%	52.0% (1989)
● TB (% of Disease arrested out of those detected)	75%	65.0% (1989)
● Incidence of Blindness	0.3%	0.7% (1990)

Source: 2

j. Population Below Poverty Line

The people of India suffer from the diseases of poverty, alongside the diseases of modernisation. Thirty to forty percent of the population live under the poverty line. This means they do not earn enough to provide their families the basic minimum caloric requirements per day.

Table — 8

Percentages of Population below the Poverty Line by States seperately for rural areas and combined for 1987-88 (provisional)

Sl. No.	State	Rural Percentage	Combined Percentage
01.	Andhra Pradesh	33.65	31.62
02.	Assam	24.35	22.64
03.	Bihar	42.60	40.74
04.	Gujarat	11.16	11.72
05.	Haryana	11.66	11.74
06.	Himachal Pradesh	9.68	9.12
07.	Jammu & Kashmir	15.36	13.34
08.	Karnataka	35.87	31.98
09.	Kerala	16.35	16.92
10.	Madhya Pradesh	41.42	36.45
11.	Maharashtra	36.49	29.07
12.	Orissa	40.35	37.90
13.	Punjab	7.18	7.02
14.	Rajasthan	24.94	23.57
15.	Tamilnadu	39.45	32.80
16.	Uttar Pradesh	34.62	33.00
17.	West Bengal	30.25	27.55
18.	All India	32.66	29.23

Source: 1

Numbering about 230 to 300 million, this group and those in the lower middle class continue to bear the burden of malnutrition,which takes its greatest toll from children and mothers. Together the above

groups who are living at subsistence level account for about three-fourths of the population. They also suffer from the lack of clean water and sanitation,inadequate housing and clothing,lack of access to education and under-employment or unemployment. All this results in various communicable disease for example,tuberculosis,leprosy,gastroenteritis,filaria etc. This ill-health further affects the working and earning capacity of the people and often results in disability and unnecessary and early death. The tragedy is that much of this is preventable by public health measures and by equitable social structures.

This factual information,though perhaps difficult to read and digest,has been purposefully given. These hard facts from official sources indicate the rather sombre situation that prevails in the country. What has been given is not the full story.

There is increasing information about the morbidity or levels of different diseases in the community. Studies in states like Kerala show that while death rates are decreasing,morbidity rates are very high.

The Government of India has recognised that given the current level of achievements,the goals of the National Health Policy may not be achievable at the national level before 2006 to 2011 A.D.

Study of health situation at State and District level needs to be undertaken by Regional/State CHA units. Collective strategies at this level can be developed based on this data,resource availability and the areas of intervention by Government and other voluntary organisations.

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HEALTH AND WHOLENESS

The following note is from a report titled **"Healing and Wholeness The Churches'role in Health"**, published in 1990. It is the first chapter of the report of a twelve year study on health and healing from the Christian perspective. The study was conducted by the **Christian Medical Commission (CMC)**, a sub-unit of the Unit on Justice and Service of the **World Council of Churches (WCC)**. The publisher is Christian Medical Commission, World Council of Churches, 150 Route de Ferney, 1211 Geneva 2, Switzerland. They have permitted the use of their material with acknowledgement of the source.

"From around the globe, the ten regional grass roots consultations on "Health and Wholeness" wove a tapestry depicting their understanding of health. The major recurrent thread throughout that fabric is the fact that health is not primarily medical. Although the "health industry" is producing and using progressively sophisticated and expensive technology, the increasingly obvious fact is that most of the world's health problems cannot be best addressed in this way. The Churches are called to recognise that the causes of disease in the world are social, economic and spiritual, as well as bio-medical. Health is most often an issue of justice, of peace, of integrity of creation, and of spirituality.

Health as a Justice Issue

It is an acknowledged fact that the number one cause of disease in the world is poverty, which is ultimately the result of oppression, exploitation and war. Providing immunizations, medicines, and even health education by standard methods cannot significantly ameliorate illness due to poverty. The Churches are called on to see this as a justice issue to be raised in the centres of power — local, national, regional and global. At the same time there is a call for commitment to more just distribution of available resources for health, both within and between nations.

Historically, the prophets cried out against the oppression and exploitation of the poor. Jesus began his ministry by quoting Isaiah's prophecy of liberation for the captives, freedom for the oppressed, sight for the blind and good news for the poor.

Many study participants shared stories of their efforts to accompany the poor and the outcast in their struggle, proclaiming and demonstrating that there is healing in working for the liberation of the poor. In serving the poor we also discover that they have much to share. Christians in struggle for justice and human rights around the world have gained new insights into the healing power of God and have learned to overcome despair and fear of death through trusting Him.

The Churches themselves have often demonstrated a top-down paternalism in their provision of health care services, inhibiting the development of community resources and achievement of self-reliance. The resulting dependency on outside resources for the provision of health care services has ultimately served the rich and powerful rather than the poor. Many examples emerged during the HHW consultations of programmes which had found ways to empower communities, through participatory learning experience, to eliminate the major causes of illness and health in their midst.

Health as a Peace Issue

Deaths due to armed conflicts and other forms of political violence have continued to be a reality of health in the eighties. For thousands in the world, state terrorism through "low intensity conflict", torture, imprisonment and other forms of human rights violations have made wellness of mind, body and spirit - wholeness — an impossibility. The threat of nuclear annihilation hangs over the entire globe, often suppressing life-giving hope.

No medications can remedy the personal and social illness arising out of the world climate of militarism. Churches are reminded of the blessedness of being peacemakers.

Healing as an Issue of the Integrity of Creation

Another significant proportion of illness in the world is self-inflicted. What we impose on ourselves individually and collectively whether out of ignorance, greed, or simply lack of self-control causes physical, mental, spiritual and ecological damage which is not best addressed by medical technology. Lifestyles and values which breed individualism increasingly cause disruption of social networks and life in community.

In industrialised countries, over 80% of illness and death is reported to be due to destructive lifestyles, and the problem is growing rapidly as a result of "modernization" throughout the world. Development of heart disease, hypertension and diabetes for example, has accompanied industrial development in many countries with the introduction of new diets and attitudes towards manual labour and the promotion of addicting drugs such as alcohol and nicotine.

As nations large and small struggle for military and technological supremacy, nuclear wastes proliferate to endanger the health of the whole planet. As materialism replaces community as a cherished value, increasing pollution threatens the life of all living things.

Churches are called by the gospel to advocate and protect the integrity of creation, with concern both for the human body and for the critical conditions which are necessary to sustain life.

Health as a Spiritual Issue

Most important to health is the spiritual dimension. Even in the midst of poverty some people stay well, while among the world's affluent many are chronically ill. Why? Medical science is beginning to affirm the biblical emphasis on beliefs and feelings as the ultimate tools and powers for healing. Unresolved guilt, anger and resentment and meaninglessness are found to be very potent suppressors of the body's powerful, health-controlling immune system, while loving relationships in community are among its strongest augmenters. Those in loving harmony with God and neighbour not only survive tragedy or suffering best, but grow stronger in the process.

When we choose the spiritual dimension of life we opt for the abundant life which is wholeness — life, a gift of God. As persons come to trust in God's unconditional love they are freed to love each other and come together, freely confessing and forgiving, in healing community. Churches have too often made confession a mandatory exercise for the purpose of condemnation, and used brokenness as an excuse for exclusion from the Christian community. The unity of Christians, whether local or global, can only be created and nurtured through a willingness to risk self-emptying, confession, listening and caring.

Traditional societies have an understanding of health which knows disturbances in beliefs and feelings as the root causes of illness. Much can be learned from a dialogue between traditioinal healers and Western medical practitioners.

Not only does the Christian gospel speak directly to the spiritual reality of health, but the understanding that God's intervention in history through Christ brings healing salvation is the heart of the Good News".

STATEMENTS FROM HEALTH POLICY OF THE CHURCH IN INDIA — GUIDELINES

by CBCI Commission for Health Care Apostolate, January 1992

1. Christian Health Care Apostolate: Christian health care exhibits love, compassion, commitment and sacrifice. The Christian response to ill-health and sickness is the healing of the total person - physical, psychological, social and spiritual. The Christian health care facility provides humanizing care, considering the dignity of the person and the needs of society.

2. Personnel: More and more committed persons will be encouraged to participate in health care so that the health care institutions and services will have adequate numbers of personnel of the different categories, with proper qualifications, competence and compassion. All personnel will be treated with respect. A sense of belonging will be created. Each person is aware of his/her duties and responsibilities.

We believe in the dignity and worth of all personnel just as all personnel working in our institutions and outside them believe in the dignity and worth of all patients and their families.

3.Training: We will continue and enhance the training of health workers at every level. It should be relevant. Stress should be laid on values. Competency based training should include training in communication, tackling social problems, planning and management at appropriate levels.

Continuing education is necessary for all persons working in the field of health.

Our institutions and organisations engaged in training must be pacesetters and innovators, guiding and supporting the health care activities of the church and the country.

a. **Medical Education:** We will review constantly medical (and dental) education, to make it more relevant and serve the people. It has to be more community based and responsive to the needs of the people. The approach will be for holistic, comprehensive healing and positive health.

b. **Nursing Education:** We welcome the greater emphasis placed on Community Health in Nursing Education. We will encourage the training of larger number of nurses.

c. **Allied Health Care Personnel:** More and better trained personnel, relevant to the needs, will be made available.

d. **Priests and Religious:** In order to have greater and better participation, the religious and seminarians will be given training in health care, especially primary health care, community health and ethics, reflecting on the theological and biblical basis of health care.

4a. Primary Health Care: Our health care services will get involved in primary health care, particularly in the rural areas and urban slums. They can also function as referral centres, supportive of primary health care.

4b. Community Health: The health care apostolate goes beyond the curative and preventive aspects of health care and reaches out to society to promote health of the people, joining with them in their efforts to attain a more just society for better health and based on gospel values.

5. Mental Health: The positive aspects of mental health and primary prevention will get our attention. The management of the mentally retarded and mentally ill and the psychological problems will receive greater attention by our health care services.

6. Social Health: Recognising the need for social health as an important component of wholeness and well being, we will do everything possible to reduce social conflicts and disparities, bringing about harmony with oneself, the family, the neighbours and the community.

7. Environment: We will create awareness among the people and decision makers of the dangers of pollution, degradation of the environment and radiation. We will take measures to prevent and reduce these hazards to health.

8. Spirituality and Health: Health care apostolate fosters spirituality in the patients, staff and people in the community bringing about healing relationships. The total good of the patients, their families and the community will be the goal. The spiritual needs, especially at times of crises, will be attended to.

9. Areas of Special Concern:

a. **Infectious Diseases:** Our health care institutions will continue to give emphasis to the management of infectious diseases. We will promote all activities which will reduce the incidence and prevalance of such diseases.

b. **Tuberculosis:** We will treat patients with tuberculosis, using the accepted regimes of treatment. We will collaborate with Government and other agencies to reduce the incidence and prevalance of this disease which continues to take heavy toll.

c. **Blindness:** Our health care apostolate will participate actively in preventing and treating blindness and taking other measures where indicated.

d. **Undernutrition** Our health care services will take special measures to promote better nutrition.

e. **AIDS:** Our institutions will give loving and compassionate care to all patients with AIDS. Prevention is the only way against AIDS at present. It calls for correction of permissive habits and sexual promiscuity and prevention of spread through blood and needles and attention to high risk groups.

10. Emergency Services

a. **Accidents:** Our health care institutions will receive and manage victims of accidents, because considerable good can come if the patient is managed without delay. The parable of the good samaritan will always guide us. Each hospital will have its own policy for handling medicolegal patients, depending on the facilities available. Every hospital should be involved in the

management of burns. In more severe burns, after resuscitation and first aid, the patient must be transferred to a burns centre, if there is one.

b. **Other Emergencies:** Emergency patients will be received with welcome, understanding the emotional aspects and urgency of the situation. What is possible will be done immediately. Where further treatment is needed and facilities are not available, the patient will be referred to places with such facilities.

c. **Disaster Relief:** Our hospitals and health care workers will be conscious of the possibility of disaster striking at any time. We will be prepared to face such disasters.

11. Special Groups:

a. **Mothers:** The special physiological and psychological needs in the process of human growth will be met. Special attention will be paid to the mother before, during and after the birth of the child.

b. **Infants:** The newborn and infants will get special care.

c. **Elderly:** Our health care apostolate will increasingly get involved in the care of the elderly. Medication will be given only where needed.

12. Rehabilitation: We will give special attention to the disabled. Christ healed many a disabled the lame, the deaf, the blind and the mentally affected and we will follow His example.

13.Women's Health: Recognising the pivotal role of women in providing holistic health care to the members of the family, our health services will take all possible steps to enable women to be more healthy and effective health care providers.

14. Women in Health Care: The Catholic Health Care Apostolate will take all necessary steps to ensure the safety of the person of women.

15. Responsible Parenthood: The health care services recognise the need for family welfare. It may necessitate the limitation of the size of the family. This will be achieved through natural methods of family planning.

16. Communication: The personnel engaged in the Catholic Health Care Apostolate will be proficient in the use of language to communicate effectively. Non-verbal methods of communication will be used when there are language barriers or when they are more effective.

Communication between persons working at all levels will be fostered as a key ingredient for effective group effort. Misunderstanding will be avoided by improved communication with patients and their families who do not have medical and health background. We believe it is our duty to listen to them carefully.

17. Interpersonal Relationships: Recognising the importance of working as a team, our health care services will give great attention to the building of good interpersonal relationships and teamwork in the institutions and the community.

18. Rational Use of Medicinal Drugs: Catholic hospitals, health centres and dispensaries will follow rational drug policy. They will promote the use of effective drugs of good quality. Cost factor will always be kept in mind.

19. Alternative Medicine: Our health care facilities will utilise optimally the different systems of medicine and health practices. Effective herbal remedies and non-drug therapies will be promoted.

20. Rational Use of Technology: Catholic health care institutions will use technology which is relevant, appropriate and cost-effective. Unnecessary testing will be avoided. Simple interventions will be used to the extent possible. Expensive technologies will be used sparingly.

People will be encouraged in the use of appropriate technology.

21. Addictions: Use of alcohol and smoking will be discouraged. The Catholic health care apostolate will deal with sympathy and understanding the problems of drug abuse. They will make the youth aware of the dangers of drug abuse and campaign for action to prevent the availability of addiction forming drugs and their abuse.

22. Care of the Terminally ill: The Catholic health care takes a positive attitude to death, placing our trust in the Lord and helping the patient (and the near and dear ones) place his or her trust in the Lord. We try to make the patient as comfortable as possible, till the moment of death, refraining from unnecessary and useless extraordinary interventions, which only tend to prolong dying.

We believe that, at the time of death, the near and dear ones need considerable psychological and spiritual support.

23. Ethics:

a. **Negligence:** The health care facilities will ensure that acceptable standards of care are exercised by all the health workers. There will be no breach of care.

b. **Informed Consent:** We believe that the patient has a right to decide what shall be done to him or to her, especially when the condition is not life threatening. To enable the patient exercise that right, we will give adequate information.

c. **Confidentiality:** Health care facilities will keep personal matters in their knowledge, which are not to be divulged, strictly confidential.

24. Right to Life:

a. **Sanctity of Life:** We believe that every person has the fundamental right to life from the moment of conception till life's natural end in this world. We believe that God alone has sovereign dominion over human life.

b. **Abortion:** The Catholic health care values the sanctity of life and respects the right of the unborn child. Any action which violates that right is unacceptable. We view with sympathy

the situation of mothers who are caught up in such situations of rape or unwed state and will do everything possible to help them.

c. **Euthanasia:** Our health care institutions are against any form of euthanasia because it is against life. However, there is no need to unnecessarily prolong the process of dying by resorting to extraordinary measures.

25. Right to Health: We believe that everyone, irrespective of any other consideration, has a right to health. Health for all will be our concern.

26a. Governance: The governace of the health care institution must be such as to give confidence to people who participate in giving and receiving health care, it must ensure that the guiding principles of compassion, love and justice are followed.

26b. Administration: The Catholic Health Care Apostolate recognises human dignity and rejects all forms of discrimination. It promotes reconciliation and peace. There is need for quality service irrespective of class or creed or social economic status. The health care institution welcomes the participation of all personnel in administration at appropriate levels.

27. Research: The health care facility will encourage research of the type and extent possible within their constraints. They will evolve practical, cost-effective ways of applying advances in knowledge, skills and attitude in health and health care services. They will also evolve mechanisms of better communications locally between health workers and also between health workers and the people.

28. Location of Health Care Services: While re-orienting the existing health care facilities, high priority will be given to locate future institutions and facilities in poorly served states and areas.

29. Linkages: Our health care facilities will develop linkages with other health care facilities, governmental and non-governmental in the area.

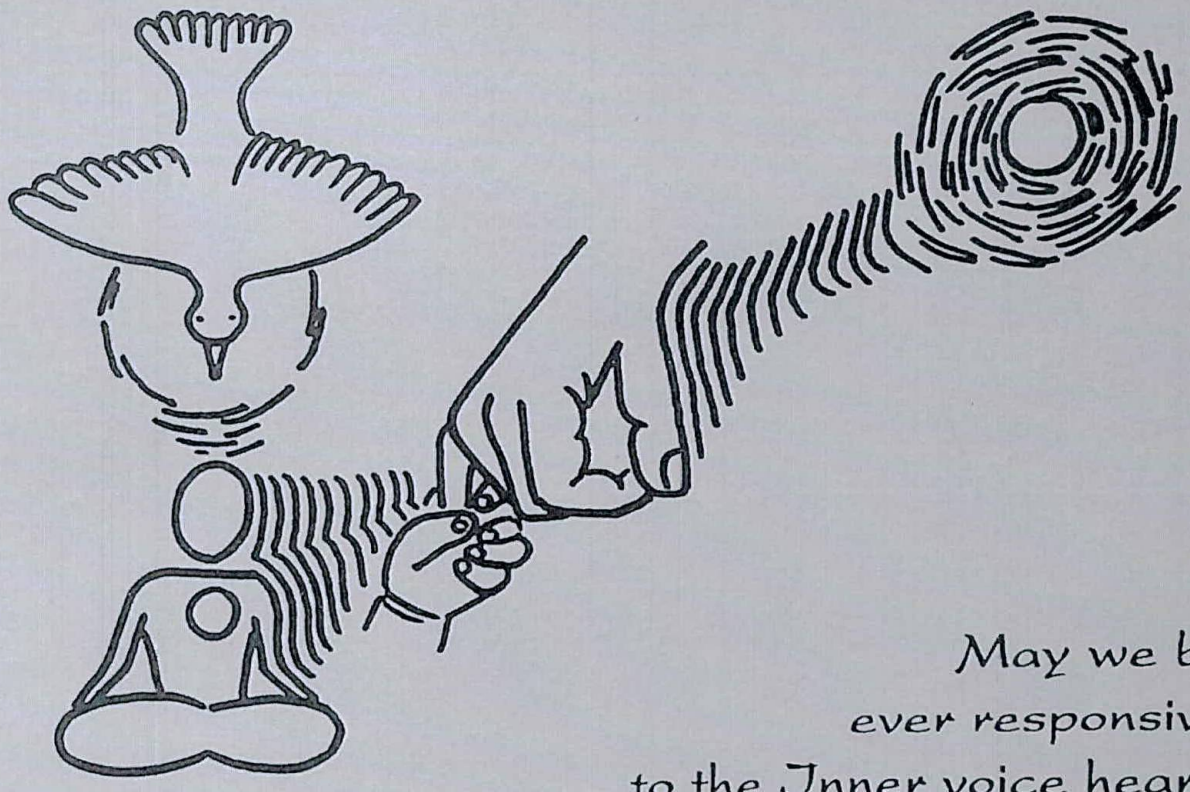
We will develop intersectoral coordination, with educational, developmental and other sectors to promote health.

At the national level, we will work with other national organisations, with similar objectives.

30. Health Care in other Institutions: The Catholic Church will provide care and services (sacraments to Catholics and spiritual help to all who need them) wherever the patient may be.

31. Parishes: Health care activities will be provided in each geographical parish area, enlisting all available resources and collaborating with other agencies including Government.

(For further information contact:
The Secretary, CBCI Commission for Health Care Apostolate, CBCI Centre,
Ashok Place, New Delhi - 110 001.)



May we be
ever responsive
to the Inner voice heard
in the cave of one's heart
in silence and stillness,

the Holy Spirit
that guides, strengthens
chastens and moulds us
during our pilgrimage
on earth

as we strive
to attain oneness
with God and His People.

"Whenever you are in doubt

recall the face

of the poorest and most helpless

man whom you may have seen

and ask yourself

if the step you contemplate

is going to be of any use to him

—— will it restore to him a control

over his own destiny?"

M.K.Gandhi

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RESEARCH FOR PEOPLE'S HEALTH

A Researcher's Encounter at the
Second People's Health Assembly of
the People's Health Movement
14th and 15th July, 2005
Cuenca, Ecuador

This is the report of :

"Research for People's Health"

A Researcher's Encounter at the Second People's Health Assembly

Organized by :

The Second People's Health Assembly of the People's Health Movement
University of Ceunca, Faculty of Medical Sciences
International People's Health University
National Association of Faculties of Medicine (AFEME), Ecuador
Global Forum for Health Research, Geneva

This report is also available at the website

www.phmovement.org/pha2

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RESEARCH FOR PEOPLE'S HEALTH

SYNTHESIS

BACKGROUND

The Second Health Assembly of the People's Health Movement and the International People's Health University was held at the Faculty of Medical Sciences of the University of Cuenca from 17 to 22 July 2005. A research encounter bringing together researchers from all over the world committed to people's health problems was organized as a pre-Assembly event on 14 and 15 July 2005. The purpose was to reflect on and debate the problems related to research on People's Health conducted globally.

The Conference takes place in a situation in which

- globalization, with its lack of regulation, has produced more inequities than solutions;
- health has become increasingly commodified;
- the majority of the population do not have access to health or health care or access has been limited substantially.

This situation has been exacerbated by the presence of problems stemming from technological and scientific dependence; inadequate research relevant to People's Health, and the increasing obstacles to the enhancement of opportunities and conditions to lead a meaningful life. Research, has not been focused on

fundamentals i.e. to improve the health of the citizens of the world. It has been oriented to reap economic profits that benefit a small minority and this was referred to as the "10/90 Gap".

The Conference included a forum for the presentation of experiences and proposals, as well as for reflection, debate and search for alternative research methodologies. This is important because the world's dominant paradigms have not resolved its major health problems but have contributed to the situation whereby a few are benefiting at the cost of the majority.

PARTICIPANTS IN THE CONFERENCE

Researchers from the five continents representing more than 20 regional and global organizations, made presentations.

They were invited to discuss and reflect on actual situations and to propose new methodologies and forms of learning for the future.

On the final day, a panel discussion comprising of the Steering Committee of the Latin American and Caribbean Health Research Forum (LACHRF) was held. Their presence was supported by the Global Forum for Health Research. As part of the panel, Dr Francisco Becerra explained the process behind the establishment of the LACHRF and announced that the Committee would also circulate a position paper soon.

THEMATIC AIMS

- Research as a tool for the liberation and transformation of People's Health;
- New research paradigms for People's Health;
- To review supportive, democratic, and social participation for the development of knowledge enabling the transformation of People's Health and lives.

IDEAS EMERGING FROM THE CONFERENCE

After the presentations by the panelists and ensuing discussions of the researchers, the following central ideas emerged:

- It is important to understand that research is a tool for social transformation. Advantage should be taken of its potential for exposing and fighting for equity in health, for the empowerment of the community using political, psychological, cultural, and social means.

  This is indispensable in order to destroy the myths of the role of research and the dominant biomedical paradigms that attempt to impose the belief that research is a privileged activity of the scientific and economic elite and therefore inaccessible to the People.

- There is a need to rethink the relationship between researchers and the community it is important to look at the community as the subject of investigations and not the object. New paradigms must therefore be advanced, including the genuine integration of researchers into the community. The key is for the latter to have critical and inclusive participation.

- The distinction between scientific needs and social needs must be addressed: the separation between scientific communities and local social communities indicates the incompatibility of interests. Meetings to plan studies should not only involve researchers, but also people's organizations

and social movements in order to discuss how they can work together to address the problems being researched; the focus and the methodologies; the goals and priorities; the resources; and the means of dissemination and action following the research process.

To achieve this, we need to design alternative and creative strategies to increase the commitment of researchers and to break down the "10/90 Gap" in health research. For this, it is necessary:

- To incorporate research into social mobilization and to use the findings to effect changes in Public Health policies;
- To change the dominant biomedical paradigm in the training of health professionals. This must be done at the same time so as to effect changes in research paradigms;
- To build multidisciplinary teams of researchers and social organizations to investigate common problems in the world with the aim of improving the Peoples' Health;
- To build real and virtual networks of researchers, regional networks; to encourage the development and participation in programmes and multi centre projects; and to use the internet wide for the dissemination of studies that contribute to the development of new research paradigms.

Ø To monitor the worsening of health indicator when various health and education systems are privatized. The challenge of researchers would be to present evidence of these effects of privatization on education and health in order to prevent it from occurring in more countries.

- ➢ To understand that research is a necessary resource for more effective interventions;
- ➢ To promote the interconnection of Regional research through networks, remembering the words of José de Souza: **"the challenge for Latin America is to learn by inventing locally or to perish imitating the global".**

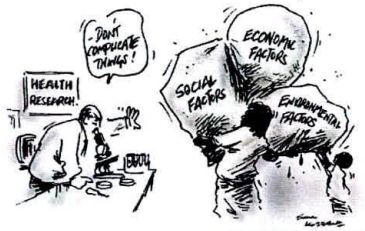
CHALLENGES FOR THE FUTURE

- ❖ We should take advantage of the potential of research for social transformation and improvements in health.
- ❖ It is critical that we move beyond the dominant biomedical research paradigm. This is also related to the dominant biomedical paradigm in the training of the health professionals.

  'Before changing things, we must change the people that change things'. - José de Souza.

- ❖ Health research is not a private activity of economic and scientific elites. We should incorporate the community as subjects and not as objects of research. There should not only be dialogue among researchers but also between researchers and the organizations and social movements that participate in the research. This would include discussions of the objectives, methodologies and the resources to be used. This contributes to the collective health development process.

- v It is necessary for researchers in People's Health to collaborate with and support organizations and social movements through the formation of global, regional, and local networks, forums and encounters that deal with common health problems.



- v Researchers, in collaboration with organizations and social movements, should take on the challenge of presenting social and scientific evidence to prevent the wave of privatization, especially in health and education, from continuing to extend throughout the world causing more pain and marginalization.
- v To define collectively themes of research that call for researchers and social organizations to unite their efforts to better understand and address health problems.

Cuenca, Ecuador
July 2005

Dr. Jaime Morales S.M.
Conference Coordinator

RESEARCH FOR PEOPLE'S HEALTH

A DECLARATION

An important "Researcher's Encounter" was held between the 14th and 15th of July 2005 in the Faculty of Medical Sciences of the University of Cuenca, Ecuador, as an associated event of the Second Health Assembly of the People's Health Movement. At this conference the researchers in People's Health made a number of observations and recommended methodologies to improve the health and life of the people of the world.

PREAMBLE

These recommendations are oriented towards training institutions, governments, investigators, NGOs and civil society representatives

Participants in the research forum in Cuenca should carry these messages to forums in different countries.

Reference must be made to the accounts of the progressive thinkers of the world and consideration given to their health research proposals relevant to the current social, economic, political and cultural contexts.

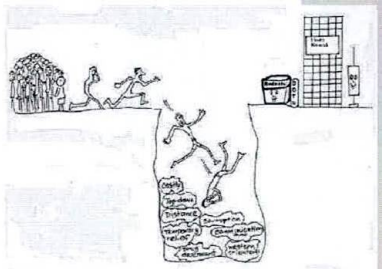
The Forum of Researchers suggested the following:

TO COUNTRIES

- Discussions in Health Research should include health sector officials who should be involved in the change processes.
- Research should aid in the revision and update of agreed health standards to ensure that they remain within legal frameworks and contexts.
- Research should help to influence state policies and thereby help prioritize allocations of economic resources for health, education and nutrition in addition to controlling and preventing diseases.
- National and local expenditure relating to the use of sectoral funds for health research should be monitored in terms of priorities as well as to assure the conducting of health systems research.

TO RESEARCHERS

- It is important to value research principally from the point of view of health and life.
- Research should bring about social action by the mobilization of people and communities as participants and collaborators. Biomedical research should be integrated with social research.



- There should also be a sincere effort to integrate quantitative and qualitative health research.

- Research findings should be shared with members of the community with whose assistance research findings and conclusions came about.
- Research should involve dialogue between investigators and representatives of communities as well as the people directly.
- There should be the creation of virtual information spaces for the learning of new research paradigms without denying or restricting access to any information that conforms to ethical norms.
- An international committee should be convened including biomedical as well as social and cultural components and primary health care.
- Research should be multidisciplinary and bring about dialogue between professionals in the health sector with professionals of other sectors such as social science, economics, etc.
- It is important to network with national, regional and international forums of health research.
- The research process should aim to improve collaboration among investigators and with local mass media, local governments and other political sectors.

TO TRAINING INSTITUTIONS

- There should be serious revision in education of human resources in health, within the framework of the new paradigm of research.
- New resources should be identified in universities that would help engagement in new paradigms of research.

- The new paradigm should not be taught, but rather be learned together with the community taking part in the research.
- It is imperative that the social research component of health research be strengthened.
- Postgraduate education/ specialization should conform more to community-based and participatory action.
- The universities should be charged with developing community research programs in a participatory way.
- It is necessary to reach the community through education using schools and other means in order to enhance the community's health with a more holistic and lasting influence.
- Through university outreach, proposals for participatory research can be developed.
- There must be efforts to establish strategic alliances for research in health and social sciences.
- There is a need to improve the capacity to develop research proposals.
- There must be adequate allocation of economic resources for the application of strategies with emphasis on health promotion at all levels.

The Faculty of Medical Sciences of the University of Cuenca and all the researchers, who attended the Forum, will be pleased to work towards the achievement of these recommendations.

Researchers From "Research for People's Health: A Researcher's Encounter" at the Second People's Health Assembly of the People's Health Movement Cuenca, 15 July 2005.

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Panelists of "Research for People's Health": a Researcher's Encounter at The University of Cuenca, Ecuador, 14-15 July 2005

Name of Panel	Institution	Theme
PANEL 1 ***President:*** Dr. Hernán Hermida ***Secretary***: Lcda. Carmen Pazán	University of Cuenca University of Cuenca	
David Sanders	University Western Cape People's Health Movement	Making health research matter: a suggested new paradigm
Sylvie Olifson-Houriet	Global Forum for Health Research	Case for more research in poverty and health.
David Legge	International People's Health University People's Health Movement	Research for health and life
Claudio Schuftan	Public Health Consultant, Vietnam	Ten thoughts about research
PANEL 2 ***President***: Dr. José Cabrera ***Secretary***: Dra. Lorena Mosquera	University of Cuenca University of Cuenca	The transforming action of research
Thando Ngomane	Global Equity Gauge Alliance (GEGA)	Global Equity Gauge Alliance
Delen de la Paz	University of Philippines, Manila People's Health Movement	The Transforming Action of Investigation as Basis for Social Mobilization
Prem John	People's Health Movement	The community and research.
PANEL 3 ***President***: Dr. Fernando Sempértegu ***Secretary***: Dr. Sergio Guevara	University of Cuenca University of Cuenca	Constructing a new thinking on research in people
René Pérez M	International Public School	Rescue of innovating experiences in health

Name of Panel	Institution	Theme
Leticia Artiles	Superior Institute of Medical Sciences	Pertinent methodological alternatives to specific scenes of the health
Eduardo Espinoza	University of San Salvador	How to make equipment the results of research
Francoise Barten	University of Nijmegan	Rescue of innovating experiences in health
Narendra Gupta	People's Health Movement	Constructing a new thinking on research in people's health to bring about social liberation and a health life
PANEL 4 ***President***: Dr. Marco Alvarez ***Secretary***: Lcda. María Merchán	National Association of Faculties of Medicine (AFEME), Ecuador University of Cuenca	Alternatives to strengthen the social
Donald Simeon	Latin American and Caribbean Health Research Forum	Alternatives to strengthen the participation in the creation of knowledge and understanding of People's Health
Antonio Alves da Cunha	Latin American and Caribbean Health Research Forum	National health system & health research in Brazil
Cesar Hermida	Latin American and Caribbean Health Research Forum	Health Research: Fora, Policies and Systems for Maternal Mortality in Ecuador
Francisco Becerra Posada	Latin American and Caribbean Health Research Forum	Report of the Task Force on Health Systems Research Latin-American and Caribbean Health Research Forum
PANEL 5 ***President***: Dra. Elvira Palacios ***Secretary***: Lcda. María Iturralde	University of Cuenca University of Cuenca	Form of integration of the scientific and social local community
Delia Sanchez	Council on Health Research for Development (COHRED)	Making Health Research work...for everyone
Thelma Narayan	SOCHARA, People's Health Movement	Methods of integration of the scientific and local communities.
PANEL 6 ***President***: Dr. José Ortiz ***Secretary:*** Dr. José Luis García	University of Cuenca University of Cuenca	Methods of integrating of the investigators
Fran Baum	Flinders University People's Health Movement	Research and the Struggle for Health
Ravi Narayan	People's Health Movement	Research for People's Health: Towards an Alternative Research Paradigm
Miguel San Sebastian	International School of Public Health, Umea, Sweden	Ways of integrating researchers in the struggle for people's health.

Medico Friend Circle Bulletin

62

FEBRUARY 1981

Research: A Method of Colonization

ZAFRULLAH CHOWDHURY

Gonososthaya Kendra, Bangladesh

Bangladesh, we say, has suffered from wars, poverty, overpopulation and natural calamities. Now we are coming to see that it has suffered as much if not more deeply, from' invested aid, ' or, aid given to primarily benefit the wealthy country. Let us look specifically at what has been developing in the area of medical research.

In 1905, Gates, main administrator of the Rockefeller assets, and a former Baptist minister, informed Rockefeller that 'Quite apart from the question of persons converted, the more commercial results of missionary effort to our land is worth a thousand fold every year of what is spent on missions' our export trade is growing by leaps and bounds. Such growth would have been utterly impossible but for the commercial conquest of foreign lands under the lead of missionary endeavor. What a boon to home industry and manufacture.' (1)

Medicine: Force for Colonization

But it did not take long for these concerned imperialists to see that medicine could accomplish even more for them than the missionary. Throughout the underdeveloped areas of the world, the great philanthropic foundations became aware that' medicine was an almost irresistible force in the colonization of non-industrialized countries.' (2) But this medical care must remain in their control if it was to continue primarily for their benefit. In the Rockefeller international health programmes, it was assured that 'the entire control of all the money would be held by our people and not the natives.' (3) In pre-Mao China, the Peking Union Medical College which had been removed from the control of missionaries and placed under the direction of the Rockefeller Foundation 'was conducted entirely by their own staff from New York and a local office in Peking.' (4)

The-endeavour met with marked success. It was Welch, the first dean of the Johns Hopkins School of Hygiene and Public Health, who lauded American medical scientists for their part in their country's 'efforts to colonize and to reclaim for civilization, vast tropical regions.' (5)

A New Imperialism

Now a new age has set out to 'reclaim a new republic, Bangladesh. In the past, as now, the glutted American market cried out for colonies to consume its goods. The medical research situation in the United States today contains the same urgency to find regions for expansion. First, the U. S. professional in the area of medical research, finds himself in la highly competitive system. Experience, not easily obtained at home, is required to gain positions, promotions, etc., and often just to 'stay afloat' in his professional field. Second, universities in the States are presently in dire need of funds, and increased prestige. Research work offers the opportunity for both, and third, the large drug companies seeking to increase their profits are out to expand the market. Bangladesh, because of the difficulties that it has faced in health and population, offers unlimited opportunities to each of the 'three groups described above.

Toe third world as a Laboratory

The procedure is somewhat standardized. The large university offers job opportunities and attractive side benefits to young professionals, and approaches the underdeveloped, overpopulated country with a plan related to health, nutrition, and family planning, financed in large part, if not entirely, by the United States. Government officials from the host country, while maintaining their government offices, are employed by the U. S. university project, in limited number.

This gives the project: the necessary' in' with the local government, while at the same time not being required to sacrifice any real control. No national is trained to the point where he could assume responsibility for the project, independent of the foreign power.

The project gains in stature and fame. Studies are made and published .reports are given, statistics are compiled, with the local' population all the while furnishing an excellent laboratory for ambitious young foreigners and the prestige and fund-conscious university.

Avoiding solutions

What are the benefits accruing to the underdeveloped host nations? In the line of scientists trained to carryon the work, it is nil. Further, the preponderance of foreign research stultifies any growth of local efforts, making a monopoly of health science. The population is used, while effective solutions to the problems of health and family planning are subtly avoided. This avoiding the real solution is an art that American medical researchers are often forced to practice in the U. S. Incredible sums of money are spent seeking cures for such killers as hypertension and cancer, Cures which the scientist knows must be avoided, for, in the U. S. as here, discovering the real solution would lead to a radical change of the life style and economic system, and place in a rather uncomfortable position, the men who control research.

Johns Hopkins Again

This past year, the deanship of the Johns Hopkins School of Hygiene and Public Health was offered to a medical man with a missionary background who refused it, opting instead for the office in Dacca, something that could eventually lead to more than a deanship. From here he will help to engineer a new plan for the old imperialism.

Recently, he and some former members of the Cholera Research Laboratory staff presented the Government of Bangladesh with a proposal for what the authors call an International Institute for Health, Population and Nutrition Research. The Government has been asked to consider the proposal in light of the fact that funds for the Cholera Research Laboratory will no longer be forthcoming. A subtle' *but* nonetheless insidious pressure. .And it might be noted that one expatriate will receive over the next 6 months, 1.5 million taka from the Ford Foundation for the work of arranging with the government the drawing up and finalizing of the proposal's official and legal aspects, without delay.

It was Ford Foundation which in 1974, also sponsored a 'trip abroad' for a former minister of health and family planning; who did not agree with the 'advice of the experts' to split the ministry. The Foundation still continues this same procedure.

The proposal for the Institute is a clear example of national interests in the areas of health, population, and social services being absorbed into the control of a foreign state. Let us look more closely at the proposal itself, which step by step illustrates how the Institute, primarily planned for the benefit of U. S. researchers, will cripple any attempt on the, national level for an effective, independent health and family planning programme. Bangladesh will serve as a laboratory whose population mayor may not benefit from the experiments and all will be done in collaboration with, under the management of and through funds and personnel in the control of the U.S.

In The Interests of U. S. A.

The proposal contains the following quote: "Establishment of a training programme for young investigators from developed countries such as the U. S. will require development of direct institutional ties with US or other university and training institutions. These ties should be encouraged in order that young scientists from the developed countries can gain the skills and expertise necessary to address health, population, and nutrition problems in/the developing world." (6)

It is not experienced scientists who are being sent to offer expertise. It is young men, needing experience, and who, if they follow the pattern of the Cholera Research Laboratory scientists will only be speaking English when they address the health problems of the developing world.

The proposal goes on to say that, "The key to the development of the proposed research program will be the recruiting of expatriate scientific manpower to conduct the research program." and that "This research program does not envision the, requirement for expanding the local technical and supporting staff." It then notes that" There are very few other Bangladeshi professionals that can be recruited in the requisite careers." It fails to further elaborate that there are three Bengali scientists at he lab who were trained elsewhere before the inception of CRL. However, the quotes do indicate quite clearly what has happened in regard to the CRL training of Bangladesh scientists, and what will happen with the new proposal, In both instances, - nothing. If during the 1960's alone over 100 US scientists were trained at the CRL, why, after the 16 years of its existence are there no Bengalis trained for the required positions. Certainly not because capable people can't be found. 'The intent of the lab had never been to train Bengali scientists. And neither is it the intent of the new proposal. The new proposal intends to maintain the hospital and field work as these are areas where the Bengali staff can be

absorbed and they need not infringe on the scientific end.

However, there is one special post for a senior Bengali administrative official, who win be "fully responsible for all of the administrative activities associated with local operations in Bangladesh." This can be seen from a few perspectives, but mainly it will serve to keep government officials at arms length. Having such an official on the pay role who will not have to answer to other Bengali officials in regard to the laboratory, will create the desired situation for unfettered, unchecked research. But why a senior official? In the youth-worshipping US it is not the senior man who holds the responsible position, or is given the real work. More often he is given the door. Why will Bangladesh get the senior? Such a position is designed as bait for the government official or his friends who are on the verge of retirement, and will spot, in the proposal, if not the opportunity for an effective post, at least for a flattering one. Of course the seniority will offer some weight with the government.

But weight with government will come from other areas too. The proposal tells us "Unrestricted funds must be available, so that the scientific' staff can be recruited from any nation where they may be available." The programme is envisioned as operating with "multiple sources of funding from a variety of international agencies and governments." With over 50 % of the funds, all of which will be controlled by the' international' board, coming from the U.S. This is real power and weight with any government. Further, the proposal reads that" Crucial to the successful operation of the lab is adequate administrative back up support in the U. S. for management, procurement, shipping of supplies, and equipment, as well as of management activities related to the expatriate staff." Procurement, shipping, supplies, equipment, -the new market for American products and inappropriate technologies, is opened up. And the U. S. will manage all, even the activities of the expatriate staff.

Why Bangladesh?

"In conjunction with studies of immunological responses to naturally acquired infection," the proposal tells us, "there will be a program of studies of the human response to artificial immunization by a variety of routes." The study has begun with animals in the U.S. The next step will be the human population of Bangladesh.

Why is it that Americans, so fond of the" sacred rights of individuals" see only masses when they are looking east? Bangladesh, too, is a country whose people have individual longings and fears and even individual rights.

Once the individual is lost sight of medical research becomes pointless. There is no one to serve, only the ego addressing the statistics. Further, once the individual is lost sight of, scientific truth cannot be maintained. Perhaps we should have known it all along, but now the' proposal' spells it out for us. The purpose of the Cholera Hospital was not primarily to serve individuals, but rather for the support it gave to the lab. As for the field surveillance operation in Matlab, "it is absolutely fundamental to the entire epidemiological research programme as well as to all population related studies." Does it matter that might have possibly been an opportunity to help people?

And then one comes across such a statement as the following, in this proposed programme. "Improving the nutritional status of lactating women will lead to shortening of the period of amenorrhea resulting in birth at shorter intervals. This would not only be detrimental to the welfare of the infant, but would also lead to rising birth rates and more rapid population growth. Chronic malnutrition may be effective in suppressing fertility by prolonging the duration of lactational amenorrhea..." What is the author trying to convince us of? That we' should strive to maintain a malnourished Bangladesh? It is hardly sick people, or hungry people, or a person that is the concern here. It is such things as "an understanding of the biological and social changes affecting human reproduction performance during times of famine." Research and study, nothing beyond. The plans and the experts who deluged the country after the war of liberation did nothing to prevent the famine in 1974, but then, perhaps the aim was only to understand the biological change taking place in the inhabitants.

Unapplied Research

The older cholera vaccine has proven virtually ineffective in preventing the disease. A later experiment with a cholera toxoid vaccine has proved equally ineffective. Now a study is being conducted that will further observe the two ineffective vaccines! 50% of all deaths in the nation are due to diahoreal disease. Over 60%, in the case of children. The major achievement of the CRL is simplified oral therapy, but this remains unavailable, throughout most of Bangladesh, to patients in serious condition. Intravenous fluids for cholera were introduced in the 1830's belt remain unavailable to rural Bangladesh even today. An editorial in the November 27, 1976 issue of LANCET, an international medical journal, points out how the record of cholera research has been marred by this failure to apply the same. It has also been noted that villages whose water is contaminated by material from Matlab cholera hospital have attack rates for cholera and diahoreal disease that is 20 times higher than the average. It illustrates the efficiency of research that can

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ROLE OF THE VILLAGE HEALTH WORKER-A GLORIFIED IMAGE

The MFC Bulletin Jan, 1980 (No. 49) has brought out the comparison between the doctor and the village health worker (David Werner in "VHW, Lackey or Liberator). The appropriate future role of a doctor, according to the author is on tap (not on top), as an auxiliary to the VHW; helping to teach him/her more medical skills and of attending referrals at the VHW's request (for the 2-3% of cases that are beyond the VHW's limits). The VHW has been recognised as the key member of the health team; is the doctor's equal, and one who assumes leadership of health care activities in his/her village, but relies on advice, support and referral assistance from the doctor when he/she needs it.

Our experience with village health worker in Nagapur village is as follows: A male matriculate 30 year old village youth was selected by a Gram-Sabha (village meeting) for medical work. He used to bring drugs from the market, dispense them and keep the record. He was paid nominally through village fund. He was taught the treatment of common ailments but the people did not like to take treatment from him and used to wait for the doctor. Concept of sanitation, good nutrition suggested through him was not relevant in existing poverty. When we could not offer him a clerical job as per his expectations, he started his "Pan Shop" in the city nearby. Naturally he did not have much time left to be spared for village health workers role. We were forced to think that village health worker should be a less educated or illiterate lady who will remain in the village. Accordingly we now selected a ' dai ' for our work. She continues to be with us till today. But apart from conducting delivery and post partum care, nothing much is contributed by her.

We were thus forced to re-think about the role of the village health worker and his/her effectiveness. Let us take up some important aspects.

SELECTION OF VILLAGE HEALTH WORKER:

As is quoted, ideally VHW should be selected by the community. In a village meeting, when you try to get a consensus, the entire community does not turn up. The participation is dominated by the vocal affluent, whose opinion cannot be considered as that of "the community" we wish to cater. These vocal people try to select some one of their interest and the real community remains silent. As the maternal care during delivery is supposed to be a filthy job, the educated and high caste candidate does not volunteer. The low caste, illiterate worker unless backed by a medical team (this includes the referral hospital), is not respected, by the village folk. Thus the insistence that VHW should be selected by entire community is impractical in the field. What matters is the selection of a less educated or illiterate VHW from the poor section of community by the doctor who sees potentialities in the candidate to carry on the work as expected.

ACCEPTABILITY OF VHW BY THE COMMUNITY

Mere living in the same village does not make a person acceptable for VHW's role, specifically if VHW comes from the poorer section and a low caste. Acceptability is directly related to the benefits that are offered through VHW. VHW by himself can not offer much. Thus in practice, acceptability of VHW depends on how much the medical team (which provides these benefits) strongly supports her as a link between the community and the health delivery structure. If all the benefits are channelised through VHW and if they are such that they appeal to the people, then only VHW is accepted. The curative role that the VHW can perform is minimal (mild gastroenteritis, short term fever, skin infections, upper respiratory infections etc) which alone cannot confer much acceptability. If the drugs doled out by VHW are not free, then the acceptability of curative role further sinks down. It is but natural that one likes to consult a medical man for his illness if he has to pay the cost. The glorification that VHW can be a doctor of the community, that' VHW can take care of almost all the cases', is too much of a simplification. Moreover to say that 95 % of illnesses in the village OPO are within VHW's limits, is to forget that it is not important how much percentage of illness can be treated by VHW (which are mostly self-limiting) but how many cases can be picked up in time and promptly referred to the doctor. Death due to delayed recognition of its seriousness may kill only 5% of the patients but it is 100% for the person who dies, and the credibility is achieved only through proper treatment of such cases.

INCENTIVES TO VHW FOR A QUALITATIVE ROLE:

The incentives for putting all efforts in any endeavour can be money/material, prestige, power or an enjoyment of creativity. The last is out of question for a poor and low caste VHW who is trying to find out his/her own identity today, struggling for the two ends to meet. Prestige and power incentives attract those who have their minimal bare necessities satisfied. Thus in practice it is the material incentive which dominates the picture. If the VHW is paid by the medical team (as is seen in most of the projects) VHW is then responsible to the team and not much to the

View-Point

MEDICAL EDUCATION AND TRAINING OF INTERNS

Medical-Council of India, on the recommendations of the Expert group on ' Medical Education and Support Manpower' has restated some of its objectives recently. The aim is to train the undergraduate student to become a general physician. The major thrust in the council's recommendations is to expose the student to the community so that he/she is able to understand the impact of social factors on health and disease, and be able to work independently either in rural or urban setting. 1) The need for teaching community medicine during preclinical years has been re-emphasized and the total time for teaching community medicine increased. 2) It has been recommended that community medicine be taught throughout the undergraduate course; all other departments should also teach preventive and promotive aspects of disease and heath. 3) PHCs should be utilised for teaching community medicine to under graduates.

I fully share the anxiety of MCI to familiarize medical-students with man in his own environment and help them in dealing with health and disease, not only scientifically but humanly. However, the manner suggested by MCI may not prove entirely successful. A fortnightly visit of students to the community will not be of much consequence. Similarly teaching student's art of history taking, without continuity of patent care, or talking about immunisation without any foundation of immunology will be a futile exercise.

A medical student should be taught behavioral sciences before even teaching anatomy and physiology. He should be exposed to the Community as well as to a hospital, to help identify his role, perceive community needs and differentiate between community and hospital environment.

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community unless the team is receptive to the feed-back from the "real community". If VHW is expected to be paid through the contribution from the community he/she serves as we did then the contribution depends on the acceptability of VHW by the community. In trying to insist that VHW should get remuneration from the community they serve, we observed that in due course of time the rich section starts keeping away (we collected the amount proportional to their economic status: thus rich person had to contribute much more in comparison to a landless labourer).

Naturally the community we were serving was split in two, the rich minority being deprived of all facilities as they refused to contribute towards the village fund. If we do not insist on contribution according to the capacity of the contribute, the total amount collected is too little to meet the requirement. The other alternative is to pay the community health worker through a nationwide government scheme. The VHW then becomes equally irresponsible to the people as is the government today.

WHAT CAN BE THE ROLE OF VHW?

With the above hard facts in mind, in the existing structure, I see VHW only as a link between the community and the medical team. This link can function for,) imparting health education, ii) offering drug treatment for some specified mild, illnesses iii) quick referral of other illnesses to the doctor, iv) conducting home deliveries when approved by the doctor in regular ANC check up and v) running community kitchen for underfives. It is imperative that medical team should offer full backing to VHW's work and should refuse patients when they come directly to medical team. She cannot be the doctor's equal at least for curative services. VHW's limitations must be realised and definite responsibilities should only be given. All these functions have to be under close supervision of the medical team.

I strongly feel that some material incentive must come from the community (contribution collected from every body who enjoys the facility but according to their capacity) and the prestige and power incentive be supplemented with the backing of medical team. In the process some VHW's may enjoy a satisfaction of creativity. When a common man contributes towards the remuneration of VHW, he also sees to it that the facilities which should percolate through VHW must reach him and if he fails to get them, comes out aloud to fight for his right (he has paid for it!).

The purpose of writing this article is to invite discussion on this issue, specially from those who are in the field and have experienced the difficulties in implementing the three tier system. Let actual field experience of all of us clearly defines the role of VHW in today's structure.

Ulhas Jajoo
Sevagram

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[Continued from page-3]
create and perpetuate an endemic area in which to observe the ineffective vaccines.

And all of this accomplished on an annual budget of 1.7 million dollars. One million going toward financing the home leaves, vacations, education, recreation, elaborate homes and furnishings, etc of seven expatriate staff, while the treatment of diahoreal patients and a Bengali staff of 770, share the remainder. The new proposal calling for 25 million in the next few years, with an additional 12 expatriate staff, and no more Bengalis, but for the senior official, is a budget obviously designed to alter the life style, but only in the direction of added luxury.

Because of the framework of the proposal and existing institutional links with Ford Foundation, World Bank, and USAID, all research in areas covered by the Institute have to pass through the programme. Monopoly is the result A monopoly of science stifling any growth of the Bangladesh scientific institutions. And the institute is not primarily, nor secondarily concerned with training Bengali scientists.

The large amount of foreign funds remaining in the full control of foreign groups will serve, consciously or unconsciously, as a pressure on government and state institutions. The result is freedom in Bangladesh for American research universities. And freedom in Bangladesh for American exporters of medicine and medical equipment, who may be researching new products for undesirable side-effects.

The following is an example of what can happen, except that it will be more difficult to challenge abuses of the Institute as it will have been granted prior controls.

The Johns Hopkins Fertility Research Project in Bangladesh found in one of their own studies done in Matlab on the use of the injectable contraceptive, Depo-Provera, that it disturbed menstruation radically, and lessened lactation. In another area of Bangladesh, the only other study done in the country on Depo-Provera, this one on a much larger scale, came up with the same indications in regard to menstruation and lactation. However, the Johns Hopkins Project, after changing the authorship of this larger study, deleted facts pertinent to the point of decreased lactation among Bengali women, and vaguely cited studies from , other countries ' to tell us that they do not report a decrease in lactation, but rather 'an increase.' (7) In this instance 'we risk making a failure of a very promising method of contraception, the Depo-Provera injection by a too hurried approach, without the proper back-up services and follow-up.

Another instance of researchers and advisors acting with parent disregard for the people and the environment is the idea of putting a laparoscope, a highly sensitive, sophisticated instrument requiring both electricity and gas in order to function, into every Rural Health Centre in Bangladesh. Even every hospital in Britain does 110t have a laparoscope.

We must become aware of the fact that medical researchers are 'experts' operating primarily for their own interests.

The Experts

Recently in Dacca airport, I met an acquaintance who said to me in the course of our brief discussion that he had counted 72 Experts in Dacca on that one day alone. And yourself, I asked. "73", he admitted. It will be an uphill road, overcoming this favourable bias toward the wisdom of the West. For a long time to come we will continue to credit foreign expertise unquestioningly with any knowledge it may lay claim to.

Who are these experts that come from thousands of miles away with the perfect plan for a village they have never seen, and a culture they have never lived? One such expert on smallpox eradication qualified as a motor mechanic. But then, he was a foreigner.

Our' western trained medical profession... sanitary inspectors originating in the British Empire, the malaria program established by WHO.... the Rural Health Centers devised by western public health experts, and most recently, the family planning programs, (8) all forms of expatriate expertise that have left the health and family planning system of Bangladesh crippled, confused, and utterly dependent.

The present split of the health and family planning ministries is the result of 'expert advice' from World Bank and USAID planners who felt the population problem would be effectively met in this manner. Now we have the doctors being hired for family planning work and paid 30 % higher than the health ministry doctor who is working in the same rural area within another narrow field. One can foresee the difficulties that will arise here without too much imagination. We will have family planning offices in each union, and a sub-centre in union, and offices for the health ministry. There are 92 maternity centres with twelve rooms each, and 205 Rural Health Center. In another five year there is to be another 150 RHC's, but these, with their 30 rooms each cannot be used for the family planning work. Nor can the Lady Health Visitors who are working in the Maternity Centres and are designated as family planning workers, be able to count on the doctors of the RHC for the back-up and support needed if their work is to be effective.

The family planning ministry envisions one worker per 5000 people, an impossible task for someone with

one month training and no support or guidance in the field. If the government had continued with its original integrated scheme, it would be in a far more effective position to deliver health and family planning services.

It is accepted that Bangladesh needs barefoot doctors, people trained in the village to meet the needs of the villagers, but the World Health Organization experts proposed an elaborate 3-yr. programme to produce medical assistants. This training will take place in the towns and most of the students will have a background of 12 years formal education. In one centre visited, 65 out of 80 enrolled had had twelve years or more educational background, and nearly all felt that the course itself should be four years or more if the programme was going to equip them to "better serve the people." Serve, no doubt in Dacca, or Libya as experience attests. But the expert advisors of WHO refuse to see any other way.

These are the experts. They have been with us, as was noted earlier, for some time. Will we sell ourselves out to them unconditionally now? There are real experts, however, and there is such a thing as appropriate aid. And neither is it impossible to discern the real from the' invested aid'. Does the plan provide for local responsibility in the foreseeable future? Does it reach the real problems with realistic solutions? Is it honest in assessing its weaknesses as well as its strengths'? The Companyganj Integrated Health Project in Noakhali is an example of appropriate aid. Now, under Bengali leadership which has been capably trained to assume the responsibility, it is meeting real health needs in a practical way.

The nutrition and women's programmes of UNICEF were also attempts in the right direction.

And as we acknowledge the truly beneficial and helpful work of certain foreign assistance, neither can we fail to accept the fact of our own weaknesses, which surely exist, Yet we do not want to compound and nourish these weaknesses by importing others.

Death Blow to Bangladesh Health Care

But' inappropriate' aid is concerned with its own purposes. The proposed institute will give researchers free rein to use the people of Bangladesh and the institutions of Bangladesh to further the purposes that suit them. And it may well be the death blow to our own a health system, whether scientific research or delivery *of* services,

In a review of a book edited by the man now employed to draw up the contract for this new international proposal, we can see that this is no spur-of moment inspiration, but- something a long time germinating. Referring to the editor's plan for an international group designed to meet disasters,

Malcolm Segall of the Institute of Development Studies at Sussex University in England remarks, "All the material resources are in the hands of "prospective donor groups" and the international body, and the national coordinating body is entirely at the mercy of inappropriate foreign technology, being guided by "management experts" (we know where from,) "data processing equipment" (we know where from,) and even computers stationed abroad. A better prescription for dependency could hardly be imagined.

"One day we hope that true internationalism will be a reality. But the" internationalism" of this book, of the US Agency for International Development, the World Bank, and, in important respects, of some of the United Nations technical agencies, hides imperialism. It takes as given that the rich capitalist states are rich and the poor peoples of the world are poor and the relief must come from the former to the latter with the paternalistic help of the formers "technical advisors." (9)

The proposal threatens the sovereignty of Bangladesh. It perpetuates the image of starving baby syndrome and basket case Bangladesh, to attract funds for foreign researchers. It disregards the fact that there is talent and ability in Bangladesh, and there is a dignity both among our professionals who will no longer tolerate being treated like school boys, and among our people in general who will not much longer tolerate being treated as mere statistics at the cost of their better health. [Courtesy-Bangladesh Times]

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The PSM department of S. M. S. medical college, Jaipur organised a month long course for fresh entrants, to which teachers from other disciplines and from the dept. of Behavioral Sciences, Rajasthan University were invited. Lectures, panel discussions, group discussions, field visits, etc. were arranged. Topics such as concept of health and disease, various systems of medicine; role of doctor as perceived by the profession; expectations of the community, man and his ecosystem; medicine, politics, economics and health; cross cultural outlook in health were discussed.

At the various medical colleges in Rajasthan, students are posted in Community Medicine as done forward posting, to train them in prevention of communicable diseases, management of infectioal diseases, maintenance of hospital and community records etc. Posting of a small group at a time, brings about a close rapport between the teacher and the taught.

Family care programmes are at present being organised by various medical colleges. One of the biggest handicaps in these programmes are that students are exposed to many medical and social problems for which no attempt is made to provide solutions. Students may be posted in slum areas with the active participation of the teachers of community medicine, paediatrics, obstetrics etc. This will help them in learning the practical application of epidemiology and skills in communication with man and management of his problems, in his own environment. As in clinical posting, history talking, lab investigations and follow up are taught so as to achieve some tangible results. Students will then take interest in the exercise.

Utilization of PHCs

The recommendation of the MCI to adopt three PHCs is very commendable. This will help the teachers of other disciplines to understand the problems of the community, to know the environment in which people live and the circumstances under which young doctors have to work. However, it is essential that

1. The teaching faculty should be prepared mentally and technically to accept the change and the additional rule they have to play.
2. The objectives of the programme should be clearly specified and periodic training- programmes be organised to help the teachers to carry out the new assignments.

In my view, the peripheral centres should be limited to training of interns only. In most medical colleges the intern programme is very chaotic because of insufficient posts. There is no link between the peripheral unit and the medical college. With the revised programme, the faculty will be able to guide and supervise the interns in providing comprehensive health care.

The PHC is the best opportunity to learn primary care and handling emergencies. A medical officer at the PHC has to work with a large number of paramedical personnel. He has to implement and evaluate various national health programmes. These require the art of communication and managerial skills. Internship is the best period to acquire these skills.

Course Content

The Medical council, every time it makes recommendations, devotes much space to community medicine. It is time MCI stops worrying about this discipline and takes a serious look at the clinical disciplines. The council should stop making the PSM dept. a scapegoat for all ills in medical education.

It is a pity that MCI's recommendations are made mandatory. This takes away all flexibility and scope for experimentation. MCI should encourage experimentation and for this it should finance suitable projects and provide sufficient funds. Therefore, it should be more than a recommending body. It must be given a status similar to U.G.C.

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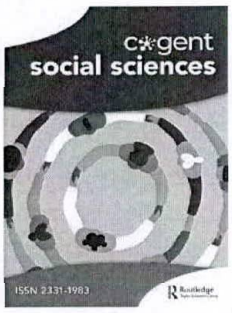

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SOCIOLOGY | REVIEW ARTICLE

Saturation controversy in qualitative research: Complexities and underlying assumptions. A literature review

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Abstract: Judgement of quality in qualitative has been a contested and controversial issue amongst researchers. Contention has always emanated from the subjective nature of qualitative studies, absence of clear guidelines in sampling as well as the lack of generalisability of findings. Numerous avenues have been suggested to improve qualitative research quality and key amongst the suggestions is the concept of saturation. It is viewed as a contemporary measure to alleviate the subjectivity in qualitative research, a yardstick for estimating sample sizes in qualitative research as well as an assurance for rigour and quality. Despite its recognition as a vital tool, it has its own fair share of controversies and contradictions. This research, through a comprehensive and evaluative literature review sought to unpack the saturation puzzle, controversies in definitions and underlying assumptions. The objective was to make a contribution to the contemporary but growing body of knowledge on the saturation conundrum. The study found out that there are various forms of saturation and with varying underlying propositions, therefore in order to meaningfully apply the concept, researchers have to appreciate the forms of saturation, link the appropriate form to their qualitative research design. It

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Favourate Y. Sebele-Mpofu is a Lecturer in the Accounting Department at the National University of Science and Technology (NUST), Zimbabwe. She currently lectures Taxation, Auditing and Strategic Performance Management. She holds a Masters in Finance and Investment and a Bachelor of Commerce in Accounting from the same University. She also holds a Master of Commerce in Accounting from the Midlands State University and a CIMA Advanced Diploma in Management Accounting. She is interested in tax policy research in developing and emerging economies. She has also researched on issues to do with the challenges faced by qualitative researchers in justifying their methodological choices. The current research on saturation was motivated by the researcher's interest in taxation, which often covers both qualitative and quantitative research approaches.

PUBLIC INTEREST STATEMENT

Qualitative research has often been criticised for weaknesses in rigour and quality. The concept of saturation has been tabled by various researchers as a tool to enhance quality in qualitative research, especially in providing transparency and guidance in sample size selection. The concept itself is controversial, complicated and contested amongst researchers yet it holds a great deal of potential in improving the quality of qualitative research findings. Disagreements range from the definition to the underlying assumptions, the lack of adequate guidelines on how and when to apply the concept, the different types of saturation as well as how to assess whether the saturation point has been attained. This study therefore, sought to extensively review literature on saturation and to address the problematic areas highlighted earlier to guide qualitative researchers when applying the concept. Qualitative researchers need to define the concept, explain the type chosen and justify its appropriateness and explain the steps taken to ensure the saturation point was reached.

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is undoubtedly important for research to define fully the form adopted, explicate the steps followed to achieve it and how it was ultimately achieved. In short, narrow the scope of saturation and contextualise it to your research.

Subjects: Education - Social Sciences; Sociology & Social Policy; Cognitive Psychology

Keywords: saturation; qualitative research; sampling; sample size; quality

1. Introduction

Saturation has become one of the novel and topical issues amongst researchers focusing on how to enhance rigor and validity in qualitative research as well as how to improve the quality and credibility in this approach (Fusch & Ness, 2015; Hennink et al., 2017, 2019; O'reilly & Parker, 2013; Saunders et al., 2018; Sim et al., 2018), despite being an old concept (Glaser & Strauss, 1967; Hennink et al., 2019). It is considered a fundamental: (1) "frequently touted guarantee of qualitative rigor" (Morse, 2015, p. 587) (2) guideline or "gold standard" to inform sample size determination in qualitative research designs (Guest et al., 2006, p. 60) (3) point of "information redundancy" (Sandelowski, 2008, p. 875) or "diminishing returns" (Rowlands et al., 2016, p. 40) (4) juncture at which "information power" is attained (Malterud et al., 2016, p. 2) (5) phase where no additional codes (code saturation) and themes and or further insights(meaning saturation) are emerging from the data (Hennink et al., 2017, p. 14). Interestingly Low (2019, p. 131), considers defining saturation as the point where "new information emerges as "problematic" and a "logical fallacy" that gives little or no advice as to how to achieve that point.

These descriptions are quite intriguing and depict two important aspects on saturation. Firstly, its criticalness and secondly the controversy surrounding perhaps its definition or its conceptualisation. Is it a phase, a rule, a measure or a standard? What is saturation? These questions continue to beg for answers. Explicating the intricacy of the term Morse et al. (2014) allude to the contradiction in meanings that are often attached to the term and the incompatibility in how to gauge it, describe it and even communicate effectual how it was attained in any study. Reiterating the dilemma on the "conceptualisation and operationalisation" of saturation, Saunders et al. (2018, p. 1893) assert that "There appears to be uncertainty on how saturation should be conceptualised and its use". Putting more emphasis on the paradox, Fusch and Ness (2015) portend that qualitative researchers often find themselves in conundrum on how to address questions such as, what is saturation. How and when does one accomplish it? How does reaching it or not reaching it affects the research? Is the impact the same across qualitative designs, considering they are multiple?

This paper is motivated, firstly by the fact that being a tax researcher using the mixed method exploratory research design for my PhD studies, two different reviewers raised two different questions: Purposive sampling yes, but how did you address saturation when sampling? And the other question was, how did you ensure saturation was achieved in your thematic analysis? These got me thinking on the complicatedness of saturation and the dilemmas researchers go through in dealing with such questions. Secondly, by recommendation by Saunders et al. (2018, p. 1904) who foreground "the need not only for more transparent reporting, but also for a more thorough re-evaluation of how saturation is conceptualised and operationalised, including the recognition of potential inconsistencies and contractions in the use of the concept". Thirdly, by the fact that "the concept is nebulous and lacks systematization" (Bowen, 2008, p. 139). Fourthly, despite the concept appearing to be crucial in qualitative research, contemporary literature expounding on it is comparatively paltry (Majid et al., 2018), it has been a "neglected" concept (Fusch & Ness, 2015, p. 1408). Lastly, saturation in sample sizes is a crucial aspect used by research reviewers, researchers, supervisors, ethical review committees and funders to assess the productive and acceptable sample sizes (Hennink et al., 2019), yet very scarce methodological research exists on delimitations that mould saturation, sample sizes needed to achieve it and ways to do so (Hennink et al., 2017; Walker, 2012). The various researchers described earlier, point to another controversy. When do we consider saturation in sampling, a priori (proposals and planning), when

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conducting data collection or during the analysis stage or even though all stages and how? This study sought to contribute to the emerging theoretical body of literature on saturation, the ongoing argumentation on the subject to widen the discourse on the intricacies and underlying assumptions as well as to evaluate the areas of convergence and divergence among researchers.

2. Saturation definition controversy. What is it? How is it defined?

Saturation has its roots in the grounded theory when it was propounded by Glaser and Strauss (1967), as a means of designing theoretical and interpretive frameworks from qualitative information as cited by various researchers on this subject (Guest et al., 2017; Hennink et al., 2017; O'reilly & Parker, 2013; Sim et al., 2018). The conception has gained momentum in recognition over the years, as a contemporary route to enhance qualitative research potency, bearing in mind that this approach is often criticised for subjectivity, lack of clarity in arriving at samples sizes and problems of generalisability of findings. Despite its growing acceptance, it is marred with controversy. Its definition, nature, purpose and variations in use are subjects of intense debate among scholars (Saunders et al., 2018). According to Low (2019, p. 131), most of the current studies on saturation concentrate largely on how many interviews, how big the sample size or how many focus groups are required to attain saturation point "rather than developing a conceptual and didactic definition of what it is". Very minimal methodological research is available on the specifications or guidelines that shape saturation, what it entails, how to evaluate it as well as on the specific and transparent parameters on how to accomplish it. Glaser and Strauss (1967, p. 61) described saturation as a parameter for judging when to cease sampling, this being the point where "no additional data are being found where the sociologist can develop properties of the category. And he sees similar instances over and over again, thereby the researcher becomes empirically confident that data is saturated". The resolution is that the saturation point is defined in relation to the cessation of sampling, shaped by designing of conceptual categories when analysing data, implying that sampling and data analysis occur as combined or concurrent process as opposed to being sequential or stage by stage process. Hennink et al. (2019) posit that this describes theoretical saturation, which leans largely on the sufficiency of the sample, to enable the researcher to generate adequate, logical, relevant and copious data to philosophically buttress emerging models. On another angle, citing Starks and Trinidad (2007, p. 1375), Saunders et al. (2018) advance that theoretical saturation takes place when all the concepts that characterise a theory are fully reflected in the data. This addresses, perhaps elements of "meaning saturation" or the "information power" suggested by Malterud et al. (2016). Data saturation is explained as when evaluative and philosophical adequacy is attained in relation to the guiding theoretical framework. The question to be answered is "do we have sufficient data to illustrate" the theoretical framework underpinning the study? (Saunders et al., 2018, p. 1895).

Hennink et al. (2017, p. 15) define saturation in two forms, code and meaning saturation, these being the stage where "no additional codes are emerging" and where no "further insights" are originating from the data. Re-affirming the former, Urquhart (2012, p. 194) details it as the point where "There are mounting instances of the same codes, but no new ones". Reiterating the latter, O'reilly and Parker (2013) and Walker (2012) assert that saturation ideal occurs where enough information has been collected to reproduce the study. Fusch and Ness (2015) delineates saturation from the thematic, meaning and coding angles expressing it as the juncture where further coding becomes unfeasible as there is no emerging information, codes or themes from further interviewing. Three forms or definitions of saturation become evident here: code saturation, thematic saturation and meaning saturation (data or information saturation). Are these three the same? Are they different? The controversy in the definition and how to explicate saturation is evident. An increase in the areas of concentration in adjudging saturation becomes apparent. The unfolding of new codes, themes and information becomes the measure to assess analysis. This is a slight deviation from the breadth of the development and refinement of those already determined (Hennink et al., 2019; Saunders et al., 2018), perhaps the information power suggested by Malterud et al. (2016).

From the discussion above, defining saturation appears, problematic and the quandary in which researchers often find themselves visible. How do they define it, from the cessation of analysis angle (Urquhart, 2012), theoretical perspective (theory development)(Glaser & Strauss, 1967) or when all theoretical constructs are fully captured in the data (Starks and Trinidad (2007) as articulated by Saunders et al. (2018), data adequacy (Fusch & Ness, 2015), "informational redundancy" (Guest et al., 2006) or even the narrower angle of saturation at individual interview level where the informant has no new information to provide and their stand point has been fully comprehended (Hennink et al., 2019).

Let's suppose, for interest sake the contradictory saturation definitions above are well understood, its attainment remains a formidable challenge. Contention surrounds, how to attain it and when as well as which methods are more likely to ensure saturation is reached? (Guest et al., 2020).

3. Saturation applicability controversy: when and how?

Researchers table diverse definitions and accounts of saturation, but they converge on some commonalities in their conceptualisations, such as the point where no new themes, codes and information other than the one already attained from the data and the point where the study can be recreated (Fusch & Ness, 2015; Guest et al., 2006). These common principles display some interconnectedness as no new information normally signifies the achievement of the other concepts on themes, codes and replication (O'reilly & Parker, 2013). Saunders et al. (2018, p. 1900) questions even these commonalities, querying the definition of a theme, stating "However, interpretations at this stage regarding what might constitute a theme, before even beginning to consider whether identified themes are saturated, will be superficial at best". The way saturation is defined influences the time and context of when and how it can be achieved (Guest et al., 2017; Saunders et al., 2018; Sim et al., 2018). The answers to the when and how questions are influenced by the research design and will accordingly vary (Morse, 2015; Morse et al., 2014). Morse (2015) leans more on the saturation posited in the grounded model by Glaser and Strauss (1967). The variation in qualitative research designs compound the intricacy of the saturation puzzle (content analysis, ethnographic, phenomenological and meta-analysis) together with the multiple methods and instruments of data collection (literature review, focus groups and interviews among others).

There is no one size fit all saturation and "What is data saturation for one is nearly not enough for another" (Fusch & Ness, 2015, p. 1408). This suggests a diversity in parameters. For example, viewing saturation in relation to meta-analysis and phenomenology can mean entirely different aspects of consideration and degrees of saturation. The former depends on reviewing literature from published studies, saturation is constructed upon the previous researchers' own explication, definition and achievement of saturation, yet the latter requires an in-depth understanding of the phenomenon under investigation from the views and experiences of participants (McKerchar, 2008; Wilson, 2015). Therefore, the latter could require greater saturation points or richer data to do so and the former lower degrees of saturation (Fusch & Ness, 2015). The other complication relates to what yardstick is used to measure saturation, is it the codes, themes or meanings? Hennink et al. (2017, p. 15) submit that the reliance on codes only is a narrow focus or analysis of saturation and "misses the point of saturation". The researchers suggest code saturation as a preliminary point to build on so as to achieve "meaning saturation", this being the point where viewpoints, variations, accurate and deep understanding of information are all reflected in the data (Hennink et al., 2017, 2019; Saunders et al., 2018). This implies that focusing on codes alone is a deficient measure of saturation, the codes can be saturated but vital information remain unconsidered. Hennink et al. (2019) interrogates the validity of using themes, suggesting that appraising saturation on the non-emergence of themes is rather a premature assessment, because occurrence alone without comprehension of the themes across data is superficial. Thematic saturation just like code saturation must be considered an initial analysis that lays a foundation for more thoughtful and comprehensive data analysis that pays attention to significance and denotation of the issue at hand as well as to comprehend "the depth, breadth and nuance of the issue" (Hennink et al., 2019).

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The question is, when will all the necessary information be captured and how can you tell that all critical information is represented with the data? Researchers provide different answers ranging from when new information becomes redundant, nothing coming up, when the topics are well understood and multiple examples can be used to explain phenomenon and where no new codes or themes emerge (Hancock et al., 2016; Hennink et al., 2017; Malterud et al., 2016). According to Morse (2015, p. 587) when the understanding of the "phenomenon becomes stronger, more evident, more consistent, more comprehensive and more mature", saturation has been attained. The researcher advances that it is not about hearing it all from the participants, but the fact that saturation is more evident when the research report or publication is comprehensively presented in a competent and confident manner. The resultant outcome is abstract and connected to literature, findings are capable of generalisability and "findings surprise and delight the reader" (Morse, 2015, p. 588). Boddy (2016, p. 428) proposes that saturation attainment provides the study findings with "some degree of generalisability. A notion disputed by Saunders et al. (2018, p. 1899) as they suggest that such a proposition deviates from the idea of "theoretical adequacy" and the "explanatory scope of theory" in research suggested by Glaser and Strauss (1967, p. 61). The researchers argue that such a deviation points to a mix up on the meanings, aim and measure of achieving saturation. The saturation conundrum is visible.

On the other hand Sandelowski (2008, p. 875) points that saturation is reached, when the researcher fully agrees "that the properties and dimensions of the concepts and conceptual relationships selected to render the target event are fully described and that they have captured its complexity and variation". These elucidations by the researchers to on how to determine saturation attainment, point to subjectivity in the judgement. Even when using thematic saturation to measure saturation achievement (which is explicated as the point where no new themes emerge), Sim et al. (2018) argues that thematic conceptualisation basing on the number of theme occurrences or number of times is flawed because what is important is not the numerical instance but the analytical frame that focuses on meanings and relationships. The frequency of the theme might not comparatively correspond to its impact or contribution to overall research (Roy et al., 2015). The key question to answer when gauging whether saturation has been attained is, Have we exhausted all the "unique dimensions that flesh out, clarify, transform or dimensionalise data that leads to a fully saturated concept?" (Roy et al., 2015, p. 254).

4. Forms of saturations: complexities and underlying assumptions

As highlighted in literature above, researchers define the term differently or don't define it at all but just proclaim to have reached saturation or where they make an effort to define it, definitions vary (Guest et al., 2020; Low, 2019; Mason, 2010). The variability in interpretations and meanings given to the term has led to some researchers drawing negative conclusions on the concept. For example O'reilly and Parker (2013, p. 190) consider the multi-disciplinary application of the concept of saturation in qualitative research as rather inappropriate yet others emphasise its importance (Hancock et al., 2016; O'reilly & Parker, 2013). Saunders et al. (2018) pronounce the challenges in the "operationalisation and conceptualisation" of saturation and further point out the hazy and often overlapping espousal of the term. They allude to the fact that researchers often combine two or more forms of saturation making its denotation complex and opaque. The researchers identify four types of saturation (theoretical, inductive thematic, a priori thematic and data saturation) and explain what these fundamentally entail and their major focal areas in the research process. The description given seems to overlook the breakdown of theoretical saturation in the two forms tabled in literature (Glaser & Strauss, 1967). "Meaning saturation" or information adequacy saturation is not evident from the models. An adapted table of saturation forms showing those outlined by Saunders et al. (2018) and in other studies are presented in Table 1.

The explanations of the above forms of saturation are themselves overlapping and their presuppositions multiplex. Constantinou et al. (2017, p. 6) advocate that perhaps for a clear delimitation of the different forms of saturation, the question to be addressed is, "what exactly is being saturated?" For example, querying the delineation of *theoretical saturation* as the juncture where

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Table 1. Different Forms of Saturation and their Explanations

Type	Explanation	Focal point	References
Theoretical saturation	Describes the generation of theoretical or conceptual categories as guided by the grounded theory. Relates to when are the concepts or dimensions of a theory are fully reflected in the data.	Sampling Analysis	(Glaser & Strauss, 1967; Morse et al., 2014) Starks and Trinidad (2007, p. 1375) as cited in Saunders et al. (2018), (Morse, 2015).
Thematic saturation	Inductive-Linked the point where no new codes and/or themes are emerging from the data. A priori- hinges on the extent to which the determined codes or themes epitomise or illustrate the data.	Analysis Sampling	(Hancock et al., 2016; Hennink et al., 2017; Urquhart, 2012)
Data Saturation	Explicates the level to which new data repeats what was expressed in previous data (data replication).	Data collection and analysis	(Fusch & Ness, 2015)
Meaning Saturation	Relates to the quality of data, "richness and thickness" when no additional information from the data emerges. Quality, deep, detailed and relevant data has been gathered.	Throughout the research process (planning, data collection and analysis	(Hennink et al., 2017; Hennink et al., 2019)

Adapted from Saunders et al. (2018) and enhanced from various researchers.

"no new information" is cropping up from the analysis of data, Low (2019), adduces that the definition is controversial and lacking in some important dimensions. Focusing on just "no new information" overlooks the initial pronouncements by Glaser and Strauss (1967) which focused on theory building and testing, suggesting that the stabilisation of the theory or when data reflect fully the constructs in the theory, saturation point has been achieved. The researcher declares that "the definition provides no didactic guidance on how researchers can determine such a point and is a logical fallacy, as there are always new theoretic insights to be made as long as data continue to be collected and analysed" (Low, 2019, p. 131). In a more compatible opinion theoretical saturation is "specifically intended for the practice of building and testing theoretical models using qualitative data and refers to the point at which the theoretical model being developed stabilises"(Guest et al., 2020).

On *code or categories saturation*, expressing dissatisfaction on the angle, Morse (2015, p. 588) suggests that what is being saturated is not the categories per se, but instead the features of data within those categories, emphasising that coding in terms of categories robs the research of the recognition of individual experiences of participants. Categorisation should be considered as an initial "step in the processes of conceptualisation, synthesis and abstraction" towards saturation. The researcher asseverates that "saturation is the building of rich data within the process of inquiry, by attending to scope and replication, hence in turn, building the theoretical aspects of enquiry".

Data saturation depicts a broader use of the conception. In this broadness, saturation is explained as the "point in data collection and analysis when new incoming data produces little or no new information to address the research question" (Guest et al., 2020, p. 2). Critiquing data saturation, Constantinou et al. (2017) table that, "what is saturated is not the data but the categories or themes". According to the researchers, data is raw views or information collected from study participants and hence can never be saturated because perspectives and words tend to

vary across participants as these are shaped by various factors such as experience, beliefs, occupation, education and understanding of the subject under study. The words or views are grouped according to homogenous characteristics or "commonalities". In this case what is being considered to have been saturated or as a measure of saturation is not the raw data itself but the categorisation of that data into themes. Saturation is therefore described as the point where "no themes emerge" from the data (Bowen, 2008; Guest et al., 2006) as opposed to where no new data emerges. It is on this line of thought that Constantinou et al. (2017) decide to adopt "themes saturation instead of data saturation".

Thematic saturation is not without disputation either. Blaikie (2018) poses the question, "what constitutes a theme? Saunders et al. (2018) observe that it is problematic to talk about thematic saturation, without giving a comprehensive definition of a theme, yet they are quick to point out that arriving at that definition is a complicated task, "superficial at its best". Recapitulating the challenge, Morse (2015) state that there is little evidence on how to accomplish thematic saturation. Further emphasizing the controversy, Braun and Clarke (2016) submits that contrary to the conceptualisation of themes by Fugard and Potts (2015) as ontologically, clear and discrete things that are in the littered in the data, just like "diamonds" waiting to be picked, themes are determined and conceptualised in various ways. Have they been "identified or developed?"(Braun & Clarke, 2016) For example, these can be "imposed *on* data; discovered *in* data or constructed *from* and *for* data" (Blaikie, 2018). This implies various ontological views and subjectivity in generating themes, adding to complexity of saturation. What are the themes being saturated and how have they been derived and conceptualised? Braun and Clarke (2016, p. 740) maintain that thematic saturation tends to turn a blind eye to the "problematic conceptualisation of a 'theme': the reporting of not themes, but of topics or domains of discussion, albeit claiming them as themes". Low (2019) suggests that themes alone are not an adequate gauge of saturation as they ordinarily become fused into the narratives that answer the research questions. It is therefore not a matter of how recurrent a particular theme is in data but whether the data enable the researcher to fruitfully develop and test evaluative arguments that allow for research objectives to be fully addressed. Highlighting the puzzle even further, Braun and Clarke (2019), continue to interrogate thematic data saturation as a yardstick to gauge the rigor and cogency of qualitative research, tabling the question, "To saturate or not to saturate?" Therefore, questions still continue as to which type of saturation should be considered vital in any study and how should it be achieved, or perhaps the resolution will be influenced by the nature of the study, its design, its objectives and the data collection methods adopted.

Van Rijnsoever (2015, p. 12) emphasises that it is important for qualitative researchers not to focus solely on the occurrence of themes but more on the characteristics and meaning of concepts reflected in the data to make meaningful assessments. This explains "meaning saturation" (Hennink et al., 2017). Reiterating meaning saturation Sim et al. (2018) propose that it is essential to consider not only how many times the theme emerges but its analytic conceptualisation, thus move from descriptive meaning of the theme to its interpretive cogency.

5. Qualitative research designs and the saturation paradox

The importance of saturation in qualitative research is explicated from two seemingly related angles: sample size determination (Guest et al., 2006, 2017) and enhancement of research quality and validity (Hancock et al., 2016). Qualitative researchers often find themselves in a predicament when striving to address these two important areas in qualitative research. There is imprecision and lack of clarity in the methodological conceptualisation of the saturation notion, "especially providing no description of how saturation might be determined and no practical guidelines for estimating the sample sizes for purposively sampled interview" (Guest et al., 2006, p. 60). The various forms of saturation explicated by researchers: theoretical, data, thematic, meaning and code saturation compound the quandary that the researchers find themselves in (Guest et al., 2020; Malterud et al., 2016; Rowlands et al., 2016; Saunders et al., 2018). What is saturation, which of the forms of saturation do they seek to address in the their research, how are they going to achieve it and how does accomplishing the chosen form impact on the other forms as well as on

research validity, are some of the difficult questions that researchers have to contend with (Fusch & Ness, 2015; Morse et al., 2014; O'reilly & Parker, 2013).

On sampling and sample size determination, the controversy lies on the fact that contrary to the quantitative approach where sample size decisions are guided by some cardinal principles such as the N rule and confidence levels, for a qualitative researcher the process is fraught with "subjectivity and arbitrariness"(Rowlands et al., 2016, p. 40). It is a matter of judgement, yet a relevant and representative sample must allow the research to address the fundamental measures of validity in qualitative research such as rigor, credibility of findings, conformability, trustworthiness and acceptability (Fetters et al., 2013). Saturation point consideration is argued to be vital in the resolution of this conundrum of sample size assessment, although most qualitative researchers fail to define their samples, sample sizes, explain how they addressed saturation in choosing their sample and others just allude to the fact that they reached saturation but without adequate elaboration on how and when aspects (Guest et al., 2017; Marshall et al., 2013). Some researchers would, for example state that saturation was achieved at between 12 and 30 interviews. This explains very little regarding the sample size and offers no justification for it or when the sample was chosen, was it a priori (Rowlands et al., 2016) or during the data collection stage study, perhaps the "interviewing until saturation" (Guest et al., 2020, p. 2) or during the analysis stage. Morse (2000) points out that saturation is largely declared and not explained by researchers, notwithstanding that complexities in measuring saturation in real life contexts are immense.

The other confusion in the saturation in qualitative research puzzle has to do with differences in the research designs as well as the data collection methods used such as literature review, observation, interviews and focus groups. These are discussed briefly in 5.1 and 5.2, with 5.3 covering the intricacy in sample size estimation.

5.1. Qualitative research designs and the saturation puzzle

Blaikie (2018) alludes to the fact that qualitative research is quite broad and that the term is often imprecisely used in a blanket manner ignoring the different logics of inquiry that characterise the research domain (induction, abduction, deduction, retroduction) and the varying epistemological assumptions that define each logic. (This was not delved into in detail in this research). As highlighted earlier the multiplicity of qualitative research designs is commonly problematic with regards to saturation as there is no blanket form of saturation. The type and breadth of saturation is often influenced by the chosen research design. The responses to the questions, when and how are shaped the research design (Fusch & Ness, 2015).What is considered saturation or even the appropriate level of saturation might vary contextually from one design to the other. For example, is it meta-analysis, ethnography or phenomenology. Meta-analysis study could possibly require lower levels of saturation because they are constructed on studies which in most cases would have addressed saturation point (Fusch & Ness, 2015). This argument is open to debate because researchers allude to the failure by most qualitative researchers to expound on saturation and how it was reached, others claim it without giving relevant facts to back up their claims (Marshall et al., 2013; Mason, 2010; Rowlands et al., 2016). Looking at the focus of ethnography and phenomenology research designs, these could demand for high degrees of saturation (Fusch & Ness, 2015, p. 1409). Saturation refers to different aspects to different researchers and suffers from inconsistency in evaluation and reporting (Morse et al., 2014; Tran et al., 2017). For example pointing to the ideal sample size to achieve saturation, Roy et al. (2015) citing Morse (1994) proposed 6 interviewees for phenomenological studies, 30 to 50 interviews or observations in the case of ethnographic and grounded theory studies and 100 to 200 sample participants where the study is ethological in nature. Marshall et al. (2013) suggests that for grounded theory qualitative studies, a sample of 20 to 30interviews is more appropriate and that single case studies should ordinarily hold 15 to 30 interviews. For meta-analysis studies, multiples of 10 were found to be sufficient (Mason, 2010). Already these proposed sample sizes point to a diversity in qualitative studies and the point of saturation variation yet qualitative

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researchers rarely give these details as bemoaned by Morse (2015), Guest et al. (2020), and Saunders et al. (2018).

The absence of compatibility in definitions and forms of saturation reflects a broadness in the term saturation and at same the controversy that compromises transparency and translates to poor reproducibility of studies and jeopardises rigour as well as the depth of the study (Constantinou et al., 2017). These are the very attributes that saturation seeks to enhance. In relation to the broadness, Saunders et al. (2018, p. 1893) argue that saturation operationalisation should be informed by the "research question (s), theoretical position and the analytical framework adopted". This suggests the need to narrow the scope of saturation conceptualisation so as to preserve its purview or perhaps to contextualise. Reiterating the concern the researchers emphasise that for saturation to be "conceptually meaningful and practically useful", its scope of application must be constricted and properly defined (Saunders et al., 2018, p. 1899).

With regards to the variation of qualitative research designs, for example, saturation point for phenomenology and that of meta-analysis will expectedly vary. Sim et al. (2018, p. 626) posit that "in the phenomenology approach, the effect on a sample size is meditated through the richness of the data obtained from individual informant". Malterud et al. (2016) and Sim et al. (2018) posit that sample size determination is also dependent on the nature of evaluation strategy, for example a research working towards an in-depth and gaining a complete picture of a phenomenon from few informants will suffice with a smaller sample size.

Table 2 makes a summary of some of the qualitative research designs and their foci as well as the multiple data collection methods that can be used to collect data, thus heightening the saturation point complexity. Each collection method has its aim and its associated challenges when it comes to saturation.

5.2. Sample size determination and the saturation point predicament

In spite of the fact that saturation is increasingly gaining ground as a tool to estimate sample sizes in qualitative research, how part of it is still fraught with confusion (Guest et al., 2020, p. 1). Morse (2015, p. 587) proclaims that "Saturation as the most frequently touted guarantee of qualitative rigour offered by authors to reviewers and readers, yet it is the one that we know least about". Various sample sizes (Guest et al., 2006, 2017; Hennink et al., 2017) have been tabled by various

Table 2. Qualitative Design, their Purposes and Ideal Data Collection Instruments

Qualitative Research Design	Purpose of Design	Data Collection methods
Ethnography	Cultural interpret data. Important features are naturalism, small samples, multiple data sources, 'emic' and 'etic' (Lambert et al., 2011)	Participant observation mostly used, In-depth interviews and focus groups suitable for use
Phenomenology	Aims to understand phenomenon in-depth through studying human experience. Meaning is derived from the feelings, perceptions and cognitions (McKerchar, 2008; Wilson, 2015)	In-depth inter views suitable for use
Grounded	Seeks to build theory from a research situation. It is iterative and integrative research design (McGhee et al., 2007)	Participant observation rarely used, in-depth and focus groups interviews suitable for use
Content Analysis	Systematically analyse textual data, making replicable and valid inferences with the hope of generating knew knowledge, insights as well as condense the data (Elo & Kyngäs, 2008)	Participant observation used sometimes, in-depth inter views and focus groups suitable for use

Adapted from Moser and Korstjens (2018).

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researchers and diverse methodologies too (Constantinou et al., 2017; Guest et al., 2020; Hennink et al., 2019; Tran et al., 2017) to address the paucity in guidelines of determining the appropriate sample size to reach saturation point and the methodologies to be employed to accomplish saturation. The shortcomings and lack of clarity in the saturation definition and its dimensions still pose a challenge for researchers perhaps limiting the adoption of the proposed methods. For example, Constantinou et al. (2017, p. 2) avails the Comparative Method for Theme Saturation (COMeTS). It is argued to be easy, comparative and inclusive. The limitation, being that, it might be time consuming and complex for larger and more qualitative studies. It could also be challenging to adopt in studies that largely rely on observation and unstructured sources of data when collecting data.

Questions persist on, when do we estimate the sample size, what is the right sample size (how many participants?), what guidelines do we follow in estimating the sample size that enables saturation point to be attained. Random sampling is difficult and "impracticable" for qualitative research, but purposive, judgemental and theoretical sampling are more feasible (Sim et al., 2018). The various sampling methods that are available to researchers also perpetuating the controversy in addressing saturation in the absence of any guidelines. Some of the other most frequently raised question is, when do we reach saturation in a sample (a priori, during data collection or analysis)? An often advanced edict of qualitative researchers is to collect data until saturation point is attained, but very little rationale has been given for this assertion in regards to the principles that underlie saturation (Blaikie, 2018; Low, 2019; Morse, 2000). Perhaps the issue of the wideness of the concept of saturation explains it problematic application in sampling. For example, which form of saturation is appropriate for which type of qualitative sampling, considering the multiplicity of the sampling techniques. In consonance, Saunders et al. (2018, p. 1899) express that "there is a risk that saturation is losing its coherence and utility if its potential conceptualisation and uses are stretched too far". Moser and Korstjens (2018) outline the different sampling methods that are at the disposal of qualitative researchers to employing in choosing a sample depending on the purpose of the research and the characteristics of the target population and these are summarised in Table 3.

Table 3. Type of Sampling in Qualitative research and their Descriptions

Type of Sampling	Description
Purposive Sampling	Selection of participants based on the researcher's personal judgement, based on the informative nature or "information power" of participants. For example experience, institutional memory, specificity, purpose of the study and their relevance to the study.
Criterion	Choosing participants on the basis of a pre-determined criteria of importance.
Theoretical	Choice of participants is driven by emerging findings to ensure sufficiency in addressing theoretical concepts that are key to the research.
Convenience	Sampling is based on availability, the readily and easily available.
Snowballing	Selection is informed by referrals by participants previously selected. For example, one tax consultants refers you to two other more knowledgeable and experienced tax consultants that he knows from their association in the tax field.
Maximum Variation	Choice of participants based on a broad range of variations in the backgrounds of these participants.
Extreme Case	Purposeful choosing of the most unusual cases.
Typical Case	Most typical and average participants are chosen.
Confirming and Disconfirming	Sampling that is meant to support checking or challenging of emerging trends or patterns in the data

Source: Adapted from Moser and Korstjens (2018).

The various methods of sampling would entail different points of saturation and equally different sample sizes, but the challenge is the lack of appropriate guidelines in literature to say in regards to sampling. Other researchers suggest that sampling adequacy should be driven by saturation and replication (Low, 2019) yet others suggest that it must be based on whether enough data to explain all the key components of the phenomenon under study can be collected (Mason, 2010). Roy et al. (2015) emphasise the comprehensiveness of the field work as what determines the sufficiency of the sample not the sample size per se.

5.2.1. What shapes sample sizes determination with regards to saturation?

Sampling decisions must be guided by the research objectives and the need to collect thick and rich data that is data of appropriate quality and of the right quantity, respectively (Fusch & Ness, 2015).The sample selected must enable the research to collect adequate information "to produce a corpus from which they can draw qualitative conclusions". (Rowlands et al., 2016, p. 43). Sim et al. (2018) allude to the a priori sample size estimation. A priori sample size determination is generally driven by the need for researchers to address the demands from funders, reviewers and ethical clearance bodies including planning resource allocation. These sample sizes are used to assess the practical aspects of the standard, subjectivity or objectivity of the study and the likely issues of validity and ethical consideration that might originate from the study. This to some extent justifies sampling a priori, but despite this justification, Saunders et al. (2018, p. 630) considers a priori sample size adjudging implausible especially in inductive exploratory research. In a similar opinion, Sim et al. (2018) acknowledge that estimating sampling sizes a priori is inherently complicated as sample size determination is an "adaptive and emergent" process influenced by the stage of "information redundancy" (Braun & Clarke, 2016, 2019; Saunders et al., 2018) or the theoretical standpoints that originate as data goes through evaluation (O'reilly & Parker, 2013). Sim et al. (2018, p. 630) asseverate that " ... a firm judgement on the number of participants ultimately required to reach saturation can only be reached once the study is under way". Malterud et al. (2016, p. 1757) warn against definitively and conclusively determining sample sizes a priori and assert that instead, it must be a matter that is taken upon as journey, with revisiting, revising, redefining and refining the sample size throughout the research leaning on issues such as saturation point as well as thickness and quality of data. This points to perhaps a "posteriori" sample size determination (Sim et al., 2018, p. 620). The researchers put emphasis on that sampling should not be a matter of how many interviews are held or how many participants were interviewed but that of who are they? What knowledge and competences do they possess which is relevant to the study as well as to the drawing of credible conclusions?

Re-affirming that just the number of participants is an insufficient basis of sample size, Hennink et al. (2017) underscore the need to pay attention to both "code saturation and meaning saturation". Sandelowski (2008) states that sampling is much more than the number of participants but their experiences as well. On a similar vein, Hammersley (2015) avows that researchers must consider the relevance and richness of participants' knowledge or information to the development of the research and theoretical insights. Therefore, it is evident that sample size estimation should be a process considered throughout the study, as the decision can be altered over the process of data collection and analysis. The number of interviews you will need will change day to day as you learn more and revise your ideas" (Baker & Edwards, 2012, p. 15). Epistemological view, aims and objectives of the study will guide the sampling process also. It not just about the number of participants but the appropriateness of the data that has been collected in the context of the angle of the research.

Malterud et al. (2016, p. 1756) advance that researchers must consider "information power" when selecting the participants and sample sizes to avoid "producing that which is already known". Information power is built on "(a) the aim of the study (b) sample size specificity (c) use of established theory (d) quality of dialogue (e) analysis strategy"(Malterud et al., 2016, p. 1756). "A study will need the least amount of participants when the study aim is narrow, if the combination of participants is highly specific for the study aim, it is supported by established

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theory, if the interview dialogue is strong and if the analysis includes longitudinal in-depth exploration of narratives or discourse details" (Malterud et al., 2016, p. 1757). The more the information power the sample holds the lower the number of participants needed. The more knowledgeable the participants, the richer the discussion and the lower the sample size needed. Complexity is visible in the information power suggestion, for example on quality of dialogue, there is an element of subjectivity as the quality of communication is not only dependent on the knowledge and competence of participants but also on the creation of rapport and interviewer skills. It is challenging to foretell the articulateness of participants in advance and the interviewer skills and bias can compromise the whole process of data collection even with the appropriate sample. The above arguments imply that the sample size resolution is a continuous process throughout the research, a priori, evaluated on an on-going basis and appraised for its adequacy in terms of analysis and publishing of results in the final state, it is thus a stage by stage process (Guest et al., 2006)

5.2.2. How to choose a sample that enables the accomplishment of saturation

How saturation was reached and demonstrated in a study provides justification for methodology as well as clarity of reasoning (Sim et al., 2018). The lack of transparency and rationalisation of sample sizes, sampling techniques and underlying presumptions compromise the credibility and validity of most qualitative researches. Researchers sometimes proffer unsubstantiated opinions that saturation was accomplished, but the how and when remain unaddressed (Malterud et al., 2016). The sample size justification and the choice of sampling techniques must strike a balance with other procedures of data collection to avoid the uneven prominence over others. Sim et al. (2018), p. 630, citing Emmel (2013, p. 154) pronounce that "it is not the number of cases that matters, it is what you do with them".

Sim et al. (2018) submit four methods of choosing sample sizes: the rules of thumb, conceptual models, numerical guidelines derived from empirical studies and statistical formulae. These have their advantages and shortcomings.

5.3. Qualitative data collection methods and saturation

There are various methods that can be used to collect qualitative data such as observation, literature review, interviews and focus groups. Different forms of saturation as well as different degrees will go along with different research methods. Questions that arise include those such as the number of interviews to be held before saturation point can be reached or how many participants to be sampled as well as perhaps how many focus group discussions to be held and how many participants per focus group. Kuzel (1992) suggests 6 to 8 interviews when researching on a homogenous sample. Hammersley (2015) argues that it is not the number of participants that is vital, the issue is which informant make up the sample. The bottom line is, Can we get enough information or do we have enough information from the sample to fully capture the complexity of the phenomenon under investigation?(Mason, 2010). What is of importance is that the interviews must be adequate to rationalise the claims and conclusions drawn by the researcher. Several research have been conducted on sample sizes especially with regards to adequate sample sizes in interviews and focus groups (Baker & Edwards, 2012; Guest et al., 2017; Hennink et al., 2017, 2019). Section 5.3.1 and 5.3.2 will summarise some these studies respectively.

5.3.1. Adequate sample sizes to reach saturation in interviews controversy

Questions have been raised concerning, how many interviews are enough and with varying answers. Baker and Edwards (2012) table that the appropriate answer is, "it depends", when asked, "How many interviews are enough in qualitative research?" The next question will be, it depends on what? Baker and Edwards (2012) avow that it is dependent upon several factors are key among them: saturation, minimum requirements of sample sizes in qualitative research, theoretical underpinnings of the study, heterogeneity of the population and the breadth and scope of research questions. Diverse sample size for interviews to enable saturation have been suggested by various researchers (Constantinou et al., 2017; Guest et al., 2006;

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Mason, 2010; Roy et al., 2015; Tran et al., 2017). Within these many studies other researchers argue for small samples (Creswell, 2014; Guest et al., 2006; Roy et al., 2015) whereas other are in favour of bigger samples and question the credibility of smaller samples (Mason, 2010; Tran et al., 2017). Guest et al. (2006) and Roy et al. (2015) discourage large samples pointing to the complexity in data analysis that could end up compromising meaningful exploration of the collected data and lead to the failure of addressing research questions fully or worse still the researcher can fail to appropriately contextualise the data to the research. Those in favour of large samples argue that they allowed for a wider investigation, ensure diverse opinions are collected and provide thick and rich data yet others argue that the richness and thickness depend on the quality of informants and interviewer's professionalism (Malterud et al., 2016) and skilfulness in creating rapport and gathering data or intensity of the data gathering (Roy et al., 2015). Some researchers argue that the size of the sample depends on whether the sample is from a homogeneous or a heterogeneous population, the more uniform the lower the number required and the more diverse the wider the sample. Guest et al. (2006, p. 78) state that "a sample of six interviews may be sufficient for the development of meaningful themes and useful interpretations", though they acknowledge that this is not always the case. Researchers should not lean on this suggestion to justify the conducting of flawed research with poorly identified samples. Reiterating the relevance of smaller samples especially when employing in-depth interviews, Rosenthal (2016) states that generalisability is not the fundamental target of in-depth interviews, but the major aim is to build a deeper understanding of the meaning behind behaviour, through an appreciation of the experiences, views and perceptions of participants, thus smaller samples are more ideal.

Hennink et al. (2017) also suggest that the number of interviews or participants will also differ in in relation to the type of saturation targeted by the research, is it perhaps meaning or code saturation? Constantinou et al. (2017) posit that saturation or the adequacy of sample size to reach saturation point can differ depending on the order with which the interviews were conducted and analysed. The researchers firstly analysed their 12 interviews in the order of how they were conducted, starting with the first and reached saturation at the 5th interview. They then reordered the analysis using reverse order and attained saturation when analysing the 7th interview. They therefore concluded that saturation point varies and is anchored on the order of interviews during analysis. Table 4 presents a summary of some selected studies conducted on saturation and suggested sample sizes.

Table 4. Studies on Saturation in Qualitative research, suggested sample sizes and rationale

Sample size	Rationale	Researcher
12 semi-structured interviews	Convenient sampling, initial sample based on suggestions by Mason (2010)	(Constantinou et al., 2017)
6 to 12 interviews	More comprehensive data can be collected from in-depth. Small samples more appropriate in homogeneous sample and experts in the field	(Guest et al., 2006; Kuzel, 1992)
5 interviews for code saturation and more interviews in order to achieve saturation on meanings	Code saturation Meaning Saturation	(Hennink et al., 2017)
25 to 200 interviews	Open ended surveys	(Tran et al., 2017)
6 interviews	Large samples could compromise credibility and contextualisation of data and quotations	(Morse, 2000)

Source: Author's compilation from various sources.

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Table 5. Studies on Focus groups, suggested numbers and Justification

Number of focus groups	Justification	Researcher (s)
6 focus groups adequate to attain code saturation but more needed to achieve meaning saturation (achieved at 9th focus group and conceptual notions saturated at 24th interview).	Code saturation can be easily attained (By 6th interview 94% of all codes had been attained and 96% of high prevalent codes had been identified), yet meaning saturation entails comprehending issues fully which is not easy	(Hennink et al., 2019)
6 Focus groups	64% of codes generated at 1st interview, 84% of the code at 3rd interview and 80 to 90% of the thematic codes emerged at 6th focus group	(Guest et al., 2017)
5 Focus groups	Used maximum variation sampling to create a diverse sample. Employed inductive approach to generate themes and deductive approach in applying the themes	(Coenen et al., 2012; Hancock et al., 2016)

Source: Various Studies.

5.3.2. The intricacy on the right sample sizes to achieve saturation in focus groups

Different numbers of focus groups to achieve saturation have been suggested by researchers (Guest et al., 2017; Hennink et al., 2019) as well the number of participants per focus group. Hennink et al. (2019) suggests six parameters influencing saturation in focus groups: study purpose, type of codes, group stratification, the number of groups per stratum, type and degree of saturation. Hancock et al. (2016) suggested that saturation could be sought to be achieved in identifying themes in three different ways in focus groups: by individual participant, by focus group and day of data collection. Hennink et al. (2019, p. 4) brings out controversial factors (group dynamics, group format, demographic stratification, group composition) that are often overlooked when discussing saturation or proposing the number of focus groups to be used to reach saturation. The researcher table that group format might influence viewpoints or equally compromise "narrative depth and understanding of issues". Demographic stratification affects saturation and samples sizes. (Hennink et al., 2019, p. 4). Such issues are neglected in the literature that expounds on saturation.Table 5 below summarised studies on proposed number of focus groups to be held that can help achieve saturation. Researchers must always bear in mind that it is not just about how many focus groups but how these are conducted, the skills of the moderator and many other considerations (Hennink et al., 2019).

6. Conclusion

Saturation is a very important aspect in qualitative research where samples cannot be estimated with certainty. Controversy surrounds its definition, application and underlying principles. It is viewed as vital for sampling and enhancing the quality of qualitative research. The study explored the intricacies surrounding the concept through a review of published studies on the subject. What became evident in these studies is the convolution in defining the term, the complexity in clearly delineating the different forms of saturation, their interconnectedness and underlying assumptions, the lack of clear methodological guidelines on the application of the concept when sampling, collecting data and analysing it and lastly the intricacy in measuring it. Despite all these complications it was also visible that the concept plays a fundamental role in boosting research quality. Saturation is important in sampling, research process and analysis. An adequate sample must be selected to accomplish saturation of theory, themes, codes, data and meaning. Saturation allows for analysis of both objective and subjective evidence. Analysis of the apparently visible (code and themes) and the hidden (meaning saturation) information is pertinent in data analysis and interpretation and they aid in the understanding of complex phenomenon under research. The researcher can adequately contextualise quotations, combine them with interpretative discussions to fully communicate the research story. Interpretation and conceptualisation

can be balanced. This research recommends that researchers must understand saturation so that they can tell a convincing story when they define the concept of saturation in relation to their own research. They must explain fully which form of saturation they targeted, give the reasons why, elucidate on their journey on how they achieved it and when? Researchers must also strive not to let their pursuit of saturation overshadow other important measures of quality in qualitative research such as: credibility, diversity, conformability, trustworthiness and reliability.

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Chapter 2
Sampling in Qualitative Research

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ABSTRACT

The chapter discusses different types of sampling methods used in qualitative research to select information-rich cases. Two types of sampling techniques are discussed in the past qualitative studies—the theoretical and the purposeful sampling techniques. The chapter illustrates these two types of sampling techniques relevant examples. The sample size estimation and the point of data saturation and data sufficiency are also discussed in the chapter. The chapter will help the scholars and researchers in selecting the right technique for their qualitative study.

INTRODUCTION

Compared to the quantitative research, the sampling procedures in qualitative research are not well defined. Selection of participants in qualitative research depends on the purpose of the research and is found to rely heavily on the researcher's discretion. This flexibility in the procedure of sampling in qualitative has led to confusion to some researchers and increases the chances of mistakes (Morse, 1991). Quantitative techniques, however, rely on randomly selected, larger samples. The sampling

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techniques and logic behind each approach tend to be unique as the purpose of each strategy is different. The logic of probability or random sampling techniques of quantitative research depends on selecting a statistically representative sample from a larger population to get the generalized results.

Citing an instance where a researcher employed random sampling in qualitative research, Morse stated that it violates the principles of sampling method of quantitative research that requires 'an adequate sample size in order to ensure representativeness and the qualitative principle of appropriateness that requires purposeful sampling and a "good" informant" (Morse, 1991, p.127). A good informant is the one who is articulate, reflective and is interested in sharing the information with the interviewers. Qualitative research focuses in-depth on small samples, even a single sampling unit (n = 1), selected purposefully for the study (Patton, 1990). The reliability and generalizability of the findings of qualitative research rely heavily on the information provided by the participants of the sample. Studies have been criticised for not describing in detail the procedure by which respondent is selected which makes the interpretation of the results difficult and also affects the replication of the study (Kitson et al. 1982). To establish rigour and credibility in qualitative studies it is the responsibility of the researcher to select the right technique of sampling (Lowenberg 1993; Sandelowski, 1995).

The chapter intends to discuss the complexity associated with sampling procedure in qualitative research. The different types of sampling techniques used in qualitative research will also be explained to facilitate selection of right kind of sampling technique for the qualitative studies.

QUALITATIVE DESIGNS AND DATA COLLECTION

Qualitative researchers need to answer one important question: How to select samples for the study? In order to analyze the variation among programs, a random sample would be appropriate in order to generalize the findings. Limited resources and limited time tend to force a researcher to evaluate samples and events carefully. They may try looking at extreme cases for more insightful results. The evaluation then focuses on understanding which events are significant. The sample need not be random or excellent or structure, it depends on what the researcher believes to be relevant for their study. Qualitative inquiry works for researchers who can work effectively under ambiguity. Qualitative inquiry has no stringent rules regarding the sample size. It depends on the purpose of the research, what's at stake, what is useful, what is credible, and what is the line of research that can be undertaken within the timeframe and use the resources at hand. The same set of fixed resources and time can be used in various ways. A large sample can be used to study differences in

behaviour, or a smaller sample size can be employed for in-depth analysis. Qualitative research is considered meaningful if it the sample selected is information-rich and the analytical capabilities of the researcher are high. Two types of sampling techniques discussed in the past qualitative researches are theoretical and purposeful sampling (Coyne, 1997).

THEORETICAL SAMPLING

The origin of theoretical sampling goes back to the discovery of grounded theory method (Glaser & Strauss, 1967). Theoretical sampling technique is developed as a rigorous method employing which qualitative data can be captured to develop a new theory (Glaser & Strauss, 1967). It is defined as the sampling process by which data can be collected to develop a theory whereby the researcher 'collects, codes, and analyses his data and decides which data to collect next and where to find them, in order to develop his theory as it emerges' (Glaser, 1978, p. 36). The process of data collection through theoretical sampling method is controlled by the emerging theory and not by any other variables (Coyne, 1997). The selection of respondents in theoretical sampling, depends on the theory and groups are chosen as and when they are needed rather than before the research begins. That is the sample in this technique is not selected from a population on the basis of some variables prior to the study. Rather 'the initial sample is determined to examine the phenomena where it is found to exist' (Chenitz & Swanson, 1986, p. 9). The initial stage of theoretical sampling resembles the purposeful sampling as researcher visit the groups which they believe will maximize the possibilities of obtaining data and leads to more data on their question. The theoretical sampling method facilitates researcher to collects, codes, and analyses data simultaneously in order to decide what data to collect next (Shaheen, Gupta, & Kumar, 2016). Sampling takes place at two stages in grounded theory's data collection. The data collection procedure of theoretical sampling can be explained through the inductive-deductive process which is a characteristic of grounded theory method. The inductive process involves the theory emerging from the data and the deductive process involves the purposeful selection of samples to test, verify, and develop the theory (Becker, 1993). Thus, the purposeful selection is an inclusive part of the deductive process of the grounded theory. Theoretical sampling allows for flexibility during the research process (Glaser, 1978). The researcher can make shifts of plan and emphasis early in the research process so that the data gathered reflects what is occurring in the field rather than speculation about what cannot or should have been observed. Further sampling is done to develop the categories and their relationships and interrelationships. The emerging categories could lead the researcher to samples in different locations. The aim is to

achieve depth in the developing categories. The emerging categories may indicate that the researcher proceeds to another location to sample there that would increase breadth in the category. In the present book, the qualitative methods discussed in the subsequent chapters use the purposeful sampling.

PURPOSEFUL SAMPLING

Purposeful sampling resides on the proposition that information-rich samples are to be selected to have an in-depth view of the phenomena (Shaheen et al., 2016). Selection of respondent is possible only after several observational visits to the sites. The visit assists in selecting and locating the sample that fits well with the purpose and objective of the study. Categories such as age, gender, experience, functional role, or ideology of the organization may serve as the starting points for researchers to narrow down on a location of the study (Patton, 1990).

Purposeful sampling differs in logic from the probability sampling of quantitative research. Purposeful samples are generally small in size, so their utility and credibility are questioned on the basis of their logic and purpose. Random probability sample, on the other hand, fails to accomplish what in-depth, purposeful samples accomplish. Qualitative sampling designs are designed by the researcher based on the objectives of the study. Samples may be added in the later stages of research as well. Sample profile may be decided and altered if information emerges indicate a change. The sampling design is flexible and emerges during the analyses in qualitative research. The sample size adequacy is subject to peer review, validation, and judgment (Patton, 1990).

The logic and power of purposeful sampling depend on selecting information-rich cases for in-depth study. Information-rich cases contain issues that are important for the research, therefore, purposeful sampling. For instance, if the research objective is to analyze the reasons and ways why firms invest in socially responsible activities, the researcher can gain insights by going for an in-depth analysis of few carefully selected annual reports of firms from different industries. Purposeful sampling helps the researcher to select sources of information that would help answer the research objectives.

There are different opinions on types of sampling techniques in qualitative research (Morse, 1991; Patton, 1990; Sandelowski, 1995; Staruss & Corbin, 1990). Morse (1991) discussed four types of sampling— the purposeful or theoretical sampling, the nominated sample, the volunteer sample, and the sample that includes the whole population. Morse has not provided any difference between purpose and theoretical sampling and used it as synonymously. In the purposeful (theoretical) sampling researcher select participants according to the objective and needs of the study.

That is in the initial level researcher selects participants who have broad and general knowledge of the topic or phenomena of the study. Then as the study progresses descriptions are expanded and based on the initial analysis further respondents are sought for. In the final stage, atypical cases are selected to verify the findings and to understand the breadth of the concept or phenomena.

But, these authors opine that all types of sampling techniques in qualitative research can be encompassed under a broader term, 'purposeful sampling'. The authors stated that the qualitative research typically focuses 'on relatively small samples, even single cases, selected purposefully' (Patton, 1990, p. 169). Patton (2002) provided 16 different kinds of strategies for selecting information-rich cases. These strategies bring forth the complexity of sampling in qualitative research. The principle underlying these strategies is to select an information-rich case that is the sample/case is selected purposefully to fit with the purpose of the study. Patton did not provide any discussion on theoretical sampling, though some similarities can be found in his conforming and disconfirming cases. Purposeful sampling requires an access to a key informant which becomes the source for other samples. The strategies given by Patton (1990) are discussed below.

- **Extreme or Deviant Case Sampling:** It involves selecting 'illuminative cases' (Patton, 2002) that illustrate a context in terms of outstanding successes or failures. That is it the approach focuses on the cases that have in-depth information. These cases may be unusual or peculiar or enlightening. This strategy would be particularly suitable for 'realist syntheses' (Suri, 2011) which examines how a program is likely to work under particular circumstances by analysing the successful and unsuccessful implementation of the program (Pawson, 2006). Say, for example, the objective of the study is to analyze the effectiveness of CSR programs; one might compare the CSR activities of different industries, or new CSR initiatives with that of well-established ones.

Past studies that have used extreme and deviant case sampling in their studies are Çetingöz (2012), Ersoy (2014), Lakhan, Bipeta, Yerramilli & Nahar (2017), and Şahin (2008). Lakhan et al., (2017) explored the common patterns of the consanguineous relationship in the parents of children with intellectual disability in India. The authors desire to explore whether intellectual disability which is inherited in families through consanguineous marriage can be the cause of intellectual disability in the children. Extreme or deviant case sampling was used to select cases from homes, camps, and clinical settings. Similarly, Ersay (2014) employed extreme or deviant case sampling to select participants (teachers and students in this case) from two kinds of school, a low socioeconomic school and a high socioeconomic background school. The

author wants to explore the challenges of citizenship education procedures in the social studies course in Turkey.

- **Intensity Sampling:** Intensity sampling involves selecting samples that are excellent or rich examples of the phenomena of interest (Patton, 2002). It is similar to extreme case sampling but with less focus on the extremes. Intensity sample includes information-rich cases that exhibit intense but not extreme inputs. Intensity sampling looks for rich examples and not unusual cases. A mild sample won't provide much to researchers for their study. So, a sample with sufficient intensity is required to make the study interesting. Intensity sampling involves prior information and judgment on part of the researcher. The researcher needs to do exploratory research to determine the nature of the variation in the study. For instance, if a researcher wants to have a comprehensive understanding of a phenomenon then it is crucial to examine cases where these changes were occurring thoroughly in the system over a sufficient period of time (Suri, 2011).

Several studies have used intensity sampling to conduct their qualitative studies are Hignett (2003), Falciani-White (2017), Issa (2006), Kashkalani, Maleki, Tabibi and Nasiripour (2017), Kleinn, Ramírez, Holmgren, Valverde and Chavez (2005), Mehra, Singh, Agarwal, Gopinathan and Nishchal (2015), Meland, Xu, Henze and Wang (2013), and Ragagnin, de Sena Júnior and da Silveira (2010). Kashkalani et al. (2017) used purposeful intensity sampling to identify the factors that are involved in determining the number of clinical faculty members required for medical schools in Iran. Similarly, Falciani-White (2017) used intensity sampling to select academic scholars from major three divisions of academia (humanities, natural sciences, and social sciences). The purpose was to understand how information behaviours function in the broader landscape of academic practice. Hignett (2003) also employed intensity sampling to choose participants from hospitals to examine the influence of organizational and cultural factors on the practice of ergonomics.

- **Maximum Variation (Heterogeneity) Sampling:** In this approach, the key dimensions of variations are identified and then cases are selected that differ from each other as much as possible. This sampling technique yields—detailed descriptions of each case which are useful for capturing uniqueness, and the shared patterns that differentiate cases from each other. Purposeful sampling captures the central themes that span across a large sample or variation. Heterogeneity is an issue in small samples as individual cases vary from each other. The maximum variation sampling turns this problem into the strength by looking into common patterns that emerge from variation in

a program. The variation in a small sample can be maximized by identifying the diverse characteristics to construct the sample. For instance, if a study looks into the effect of a new legislation in the State, specifically at different levels of management, and across rural and urban areas, there may not be enough resources to randomly select enough information across the state. The researcher can ensure a variation in geographical locations for the purposes of the study.

Some of the studies that have used maximum variation sampling in their studies are Dansereau et al. (2017), Gokturk and Dinckal (2017), Zhang, Wang, Millar, Li and Yan (2017), Wendell, Wright and Paugh (2017), Kendall-Gallagher, Reeves, Alexanian and Kitto (2017), Klingler and Marckmann (2016), Liu, Zhao and Xie (2016), Van Niekerk (2016), Demartoto, Zunariyah and Soemanto (2016), Bursa and Ersoy (2016), Vo, Le, Le, Tran Minh and Nuorti (2015), Goldman, Reeves, Wu, Silver, MacMillan and Kitto (2015), Véliz, Berra and Jorna (2015), Eschler, Kendall, O'Leary, Vizer, Lozano, McClure, Pratt and Ralston (2015), Çiçeklio¡lu, Öcek, Turk and Taner (2015), Bahadori, Sanaeinasab, Ghanei, Mehrabi Tavana, Ravangard and Karamali (2015), Cakmak, Isci, Uslu, Oztekin, Danisman and Karadag (2015), Wassenaar, van den Boogaard, van der Hooft, Pickkers and Schoonhoven (2015), Patel, Nelson, Id-Deen and Caldwell (2014), Grant, Ure, Nicolson, Hanley, Sheikh and McKinstry, Sullivan (2013), Hsu (2012), Briggs, Slater, Bunzli, Jordan, Davies, Smith and Quintner (2012), Cavalli-Björkman, Glimelius and Strang (2012). To assess the training need for knowledge, attitude, and practices (KAP) of in large canteens of schools and factories towards Le et al. (2015) used maximum variance sampling and found that food-handlers of schools were having adequate KAP then the food-handlers of factories. Zhang et al. (2017) conducted a qualitative study to understand the coping mechanism of public healthcare officers in the backdrop of health reforms in China. The authors employed maximum variation sampling method to select 30 public healthcare provider having variation in terms of different specialties. Similarly, Wassenaar et al. (2015) used maximum variation sampling to recruit nurses varying in terms gender, age, work experience and who were appointed in intensive care units of different hospitals. The authors want to study the views of nurses regarding their role in intensive care unit's patients' perception about safety.

- **Homogeneous Samples:** A small homogeneous sample directly contrasts the maximum variation sampling strategy. The purpose is to discuss some particular subgroup in details and have an in-depth analysis of the same. A study that uses varied participants may need to use in-depth information about a particular subgroup. A study that looks into the mentor-mentee relationship may focus in detail on one particular mentee. Focus group

interviews concentrate on homogeneous groups and conduct open-ended interviews with small groups or focused issues. Sampling in focus groups involves bringing individuals from similar backgrounds to participate in a group interview.

Some of the scholars who have used homogeneous sampling technique to select respondents for their studies are Metin, Taris, Peeters, van Beek and Van den Bosch (2016), Akkermans, Brenninkmeijer, Schaufeli and Blonk (2015), van Beek, Taris, Schaufeli and Brenninkmeijer (2014), and Jeurissen and Nyklíček (2001). The role of the employees' on the occupation outcomes such as work engagement and work performance was examined by Metin et al. (2016). The author selected homogeneous sample i.e., bank employees in this study to understand their state of authenticity and in its influence on work performance outcomes.

- **Typical Case Sampling:** Typical cases are selected with the help of key informants like knowledgeable participants, who know what is typical. Such typical samples can also be selected from survey data, demographic analysis, or any other data that provide normal characteristics from which "average" can be distinguished. When the unit of analysis is an entire community, typical cases can be easily identified. It is however important, to get a consensus regarding which programs are "typical."

Some of the studies that have used typical case sampling are Ahi and Balcı (2017), Quinn, Hunter, Ray, Quadir, Sen, and Cumming (2016), Jaffri, Samah, Mohd Tahir, and Mohd Yusof (2016), Asl, Iezadi, Behbahani and Bonab (2015), Yeh (2015), Sung-Gu (2015), Tarman and Kuran (2015), B-Lajoie, Hulme and Johnson (2014), Kezar (2013), Lash, Kulakaç, Buldukoglu and Kukulu (2006). Ahi and Balcı (2017) to explore the knowledge of children about a biologically-based complex system used a typical case sampling method to select children from different levels of schooling and age groups. The children who were having similar characteristics were combined together to form different focus groups. Similarly, Quinn Hunter, Ray, Quadir, Sen and Cumming (2016) used typical case sampling to select women who were physically disabled. The authors want to examine different forms of discrimination and exclusion of disable women from the mainstream society compare to the peers who were not suffering from any form of disability. Lash, Kulakaç, Buldukoglu and Kukulu (2006) also used typical case sampling to select nursing and midwifery students who have undergone verbal abuse originated from clinical instructors, agency nurses, physicians, patients and their families.

- **Stratified Purposeful Sampling:** A typical case sampling strategy can be combined with others, taking a stratified purposeful sample of different cases. This is less than full maximum variation sample. The stratified purposeful sample is used to capture major variations and not to identify a common cause. Each stratum constitutes a fairly homogeneous sample.

Some of the qualitative research that have employed stratified purposeful sampling are Danforth, Weidman and Farnsworth (2017), Aktaruzzaman and Plunkett (2017), Khwankong, Sriplung and Kerdpon (2016), Karamanidou and Dimopoulos, (2016), Elpers, Lester, Shinn and Bush (2016),Tajeddini and Trueman (2014), Sandelowski (2000), and Nielsen, Dyhr, Lauritzen and Malterud (2004). Danforth et al. (2017) used stratified purposeful sampling to select participants from different management roles of 15 commercial construction companies. The objective was to understand the approaches these companies had employed to withstand the great recession of 2007-2009. Similarly, Tajeddini and Trueman (2014) employed stratified purposeful sampling to approach managers and owners of 11 high-class hotels of Iran. The objective of this study was to explore the perception and meaning of innovativeness in the hospitality industry from both the perspectives of managers as well as owners.

- **Critical Case Sampling:** Purposeful samples can be collected from critical cases. These are cases which are important in a particular context. Data is collected after understanding the events of a critical case. If a particular group has problems, it can be assumed that every other group has similar problems. Critical case sampling is preferred in cases where the study is restrained due to limited resources. In such situations, it is a strategic move to opt for the site that would yield the best information and have an impact on the findings. Studying a few critical cases does not help in generalizing the findings, but logical generalizations can be made from the evidence provided by such in-depth study.

Some of the past qualitative studies that have used critical case sampling are Crowther, Bostock and Perry (2015), Onwuegbuzie, Frels, Leech and Collins (2011), Devine and Boyle, Boyd (2011), Devine Boyd and Boyle (2010), Davies and Drake (2007), Drake and Davies (2006), and Melton, Nofzinger-Collins, Wynne and Susman (2005). By employing critical case sampling technique Devine and Boyle, Boyd (2011) conducted in-depth interviews with public officials of Northern Ireland and the Republic of Ireland. These participants were authorized to take decisions on sports tourism. The purpose of the study was to explore the factors that strengthen the relationship between public agencies who are engaged in sports tourism. Similarly, Davies and Drake (2007) to understand how outsourcing home care strategies best

align with the Best Value policy of UK, used critical case sampling to locate local authorities and private providers who are involved in the outsourcing process.

- **Snowball or Chain Sampling:** This is the most common approach used by researchers to locate information-rich key informants. By asking the respondents who to talk with, the size of the snowball increases with the accumulation of new information-rich cases. Recommended informants provide the names of recommended respondents who are used in the study. Peters and Waterman's (1982) study Search of Excellence is one of the prominent studies that used the snowball sampling technique by asking a group of people to identify well-run companies.

Some of the qualitative research that have used snowball sampling are Melton, Nofzinger-Collins, Wynne and Susman (2005), Rutkow, Smith, Lai,Vernick, Davis and Alexer (2017), Ravichran, Israeli, Sethna, Bolden and Ghosh (2017), Ramesh, Ireson and Williams (2017), Chaudhary and Chaudhary (2017), Lee (2017), Kibirango, Munene, Balunywa and Obbo (2017), Hidayat, Rafiki and Aldoseri (2017), Drum, Pernsteiner and Revak (2017), Tam and Gray (2016), Dusek, Clarke, Yurova and Ruppel (2016), Subramani, Jan, Batcha and Vinodh (2016), Kumar and Jauhari (2016), Sepahv, Mousavi and Ouranji (2016). Using snowball sampling Kumar and Jauhari (2016) located 192 respondents to explore the role of organizational justice, learning goal, and need satisfaction in the relationship between participative decision making and turnover intention of the employees. Similarly, using snowball Chaudhary (2017) searched the employees to understand the influence of employees' perception of corporate social responsibility on their work engagement level.

- **Criterion Sampling:** Criterion sampling reviews all cases that meet some pre-determined, significant criterion and is generally used in quality assurance efforts. Criterion sampling is used in studies that are information-rich and may reveal major issues/weaknesses and provide areas for improvement. Criterion sampling adds a qualitative aspect to a management information system. It can be employed to identify cases from close-ended questionnaires for an in-depth study. Some of the past qualitative work that has used criterion sampling techniques are Hovland-Scafe and Kramer (2016); Dağ and Sarı (2017); Hamilton, Worthy, Kurtz, Cudjoe and Johnstone (2016); Hacieminoglu (2014); Arikan and Ozen (2015). For instance, Arikan and Ozen (2016) use the criterion 'possession of a mobile device' to select participants. The objective of the study was to provide insights into the learning environment that uses tablets and quick response codes to enhance the vocabulary of English language of students.

- **Theory-Based or Operational Construct Sampling:** Theory based sampling is s formal and basic research version of criterion sampling. The researcher samples events, timelines or people based on their research needs. The sample is hence representative of the event. Scholars who have used theory-based sampling technique in their studies are Pate (2006), Schneider, French and Chen (2006), Hsu and Shyu (2003), Escudero-Carretero, Prieto-Rodriguez, Fernández-Fernández and March-Cerdà (2006), Cruz, Bhanu and Thakoor (2014).
- **Confirming and Disconfirming Cases:** During the initial qualitative fieldwork, a researcher gathers data and allows patterns to emerge. After a period of time, the exploratory process is taken over by confirmatory fieldwork. The confirmatory phase tests the patterns evolved during the exploratory study. This step tests ideas and checks the viability of findings using new information. Skinner (1985) and Allan and Jenkins (1983) are some of the scholars who have used confirming and disconfirming cases sampling technique to choose respondents for their qualitative studies.
- **Opportunistic Sampling:** Qualitative research involves on-the-spot sampling decisions that help collects data from new opportunities that arise during the process of data collection. Qualitative designs involve taking advantage of new opportunities after the fieldwork starts. It is not possible to record everything that is observed, so the researcher needs to decide which events to observe, what to analyze and what time period to use for data collection. These decisions are not made initially but evolve during the study. Scholars that have used opportunistic sampling techniques in their studies to select information-rich cases are Williams, Kruse and Dorn (2016), Archibald and James (2016), Murillo, Kenchington, Lawson, Li and Piper (2016), Kendall, Macleod, Boyd, Boulanger, Royle, Kasworm and Graves (2016), Holt and Powell (2015), Bradley and Griffin (2015), and Evans and Dowler (1999).
- **Purposeful Random Sampling:** Studies that use a small sample size do not necessarily mean that sampling strategy should not be random. The random sampling of small samples tends to increase the credibility of the results (Patton, 1990). The credibility of random, systematic samples is high. A small random sample is used by researchers for credibility and not representativeness. A small purposeful random sample clarifies any doubts regarding the reasons why a case is selected but does not allow for statistical generalizations. Oladapo and Ab Rahman (in-press), Ly, Labonté, Bourgeault, and Niang (2017), and Thompson Jr. (1973) used purposeful random sampling in their studies to select participants relevant to their studies. To understand the role of telemedicine as a strategy for healthcare support in underserved

areas, Ly et al. (2017) used purposeful random sampling to select physicians from government and district hospitals.

- **Sampling Politically Important Cases:** This sampling strategy requires in-depth analysis of an event in order to gain attention and be used. The researcher does not alter the image of the event/politics but simply studies it. This sampling strategy increases the usefulness of such information limited number of cases can be accessed. Wonka (2016) and Agné (2006) have used a politically important sampling technique to select participants for their studies.
- **Convenience Sampling:** Convenience sampling refers to collecting data by convenience: doing it fast and conveniently. It is one of the most commonly employed sampling strategies as well as the least desirable (Patton, 1990). Evaluators use this sampling technique as collecting sample this way is easy and inexpensive. Though convenience and cost of high significance, they should not be the first factor to be considered. The utility of such sample should be considered as a primary factor. Convenience sampling is, therefore, neither purposeful nor strategic (Patton, 1990, p 181).
- **Combination or Mixed Purposeful Sampling:** Researchers tend to estimate an approximate sample size, but finally may end up with a random sample that may be a combination of several sampling techniques. So, the above-discussed approaches need not be mutually exclusive. Quinn (2016) and Benoot, Hannes and Bilsen (2016) have used a combination of or mixed method purposeful sampling to select participants in their study. Quinn (2016) used a combination of typical case sampling and criterion sampling and Benoot et al. (2016) used a mixture of intensity sampling, maximum variation sampling and confirming/disconfirming case sampling to select those participants who were the victims of sexual adjustment which in turn has led to a cancer trajectory.

DATA SATURATION IN QUALITATIVE RESEARCH

Decisions regarding the closure of further search of the sample in qualitative research reside on two assumptions— data saturation and data sufficiency. The decision to stop further data collection is guided by the purpose, quality, and synthesis of the data collected by the researcher.

- **Data Saturation:** It is associated with the situation when a further collection of data provides little in terms of 'further themes, insights, perspectives or information' (Suri, 2011). In qualitative research open-ended, leading, and

probing questions are used which leads to the generation of rich information and data. Further, the sampling techniques in qualitative research are purposeful in nature where chances of data saturation are very high, as the researcher selects information-rich cases (Patton, 2002). Thus, when no further new information generating researcher should stop data collection and should look for selecting atypical cases to validate and give comprehensive meaning to the findings achieved (Morse, 1991).

- **Data Sufficiency:** Paterson and her colleagues suggested that the data collected in qualitative studies 'should be sufficient to permit comparisons among selected dimensions and constructs' of the study (Paterson et al., 2001, p. 37). Also, the results should be cohesive and reflect a synthesis of other related works. As rightly noted by Suri (2011) that 'the logic of data sufficiency is guided by the synthesist's perception of what constitutes sufficient evidence for achieving the synthesis purpose' (p.73). Lastly, the researcher should also see that the data collected is sufficient to provide the answer to the research question of the study.

SAMPLE SIZE ESTIMATION

Estimation of sample size in qualitative research depends on several factors. Morse (2000) suggested that to reach a situation where data saturation point is achieved, researchers should consider a number of factors such as the scope and nature of the study, quality of data received, the amount of useful information obtained from each respondent, the rounds of interview conducted per respondents, and the use of shadowed data. These factors are discussed further:

- **The Scope of the Study:** The belief is that the broader the scope of the research is the longer it will take to reach the saturation of data. Care should be taken to narrow the topic of the study at the initial stage. But, it should not be done at the expense of missing important aspects of the topic under study. Narrowing the topic once the data collection is started will lead to biased results.
- **The Nature of the Topic:** If the topic is familiar and clear, and the information is easily accessible and available then fewer respondent will be needed. But, if the topic is not obvious and unfamiliar, more respondents are required to collect sufficient amount of data. Thus, one should make their topic clearer and define it properly so that respondents can understand it easily and provide more clear information.

- **The Quality of Data:** The quality of data also guides on the number of respondents required for the study. The quality of data depends on several factors, for instance, whether the respondents have given sufficient time to the interviewer and understands his objectives. Similarly, the ability of the respondents to reflect and relate to the topic of the study determines the quality of the data. The close association and experience of the respondents on the phenomena also determines the quality of data. Thus, care should be taken to select right informants and if the interviews results turn out to be poor, strategies to conduct further rounds with new informants should be planned. Also, researchers should try to be more probing without losing the ethical considerations. Incomplete interviews can be supplemented with the observation of the researchers but care should be taken to avoid personal biases.
- **The Shadowed Data:** Sometimes participants along with their own experience discusses the experience of others and how their own experience differ or resembles from others, and why. The information reported about the experiences of others is called shadowed data. Shadowed play a significant role in the qualitative research as it provides the researcher with 'some idea of the range of experiences and the domain of the phenomena beyond the single participant's personal experience' (Morse, 2000).

CONCLUSION AND RECOMMENDATIONS

Qualitative research has always been the preferred method to explore new theories and provide support to different phenomena. Both emic and etic perspectives are provided through qualitative research. Sampling plays a crucial role in selecting the information-rich cases. With the growth of research activity in recent years, each topic tends to be examined by different researchers in diverse contexts, employing a wide range of methods, invariably resulting in disparate findings on the same topic. Making useable sense of such complex bodies of research can be an overwhelming experience for most stakeholders. These stakeholders include policymakers, administrators, educators, health professionals, funding agencies, researchers, students, patients, various advocacy groups and the wider community. Research syntheses can play an important role in disseminating research knowledge and in shaping further research, practice and public perception. Hence, issues of ethical representations (Suri, 2008) and methodological rigour in research syntheses are as crucial as they are in primary research (Petticrew & Roberts, 2006)

There are several approaches to sampling. Each approach has a different purpose. Samples have multiple purposes in the qualitative study and more than one qualitative

sampling strategy can be employed. All such strategies may be used in the future for analysis. There are other ways of collecting samples qualitatively, but they are used to collect information-rich cases. Such cases are significant for the study and may be analyzed in-depth. Sampling decisions are made after careful deliberations regarding the evidence available, alternatives and limitations. The strategy should fit the objectives of the study and within the resources of the researcher. The researcher evaluates the best sampling strategy considering the relevance and credibility of the study. The reasons need to be explicitly explained and any probable limitations need to be chalked out. However, it should be realized that there is no '*perfect sampling strategy*'.

CRITICAL QUESTIONS

1. How sampling of qualitative research varies from the sampling of quantitative research?
2. Differentiate between theoretical and purposeful sampling.
3. Discuss different types of sampling strategies in purposeful sampling.
4. How is sample size estimated in qualitative techniques?
5. How is probing done in the qualitative method?

SUGGESTED ANSWERS

Answer 1: In qualitative research, samples are selected subjectively according to the purpose of the study, whereas in quantitative research probability sampling technique are used to select respondents.

Answer 2: Theoretical sampling is a part and parcel of grounded theory and purposeful sampling is the sampling strategy used in other qualitative methods. The initial stage of theoretical sampling has close resemblance with purposeful sampling techniques.

Answer 3: Patton (2002) discussed 16 different strategies of purposeful sampling. They are extreme or deviant case sampling, intensity sampling, maximum variation (heterogeneity) sampling, homogeneous samples, typical case sampling, stratified purposeful sampling, critical case sampling, snowball or chain sampling, criterion sampling, theory-based or operational construct sampling, confirming and disconfirming cases, opportunistic sampling, purposeful random sampling, sampling politically important cases, convenience sampling, combination or mixed purposeful sampling.

Answer 4: Sample size in qualitative research depends on—data saturation and data sufficiency. That is whether the collected data is sufficient enough to capture the themes and theories of the study and whether no new information or theme is emerging from the data.

Answer 5: Researchers use open-ended questions to collect in-depth information about the issues of the study. Leading questions are used to fill the gaps in the information and to encourage respondents to provide more information. The researcher also tries to be sympathetic while handling sensitive issues and shows interest to make the researcher comfortably.

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KEY TERMS AND DEFINITIONS

Data Saturation: It is a situation which indicates that adequate data have been collected to support the study.

Emic Perspective: Information or data from the perspective of the respondents/ participants of the study.

Etic Perspective: Information or data from the perspective of the researcher.

Information-Rich Cases: Information-rich cases are those respondents from which researcher can obtain in-depth information about the issues of the research.

Purposeful Sampling: It is a non-probability sampling technique that is used in qualitative research on the basis of characteristics of a population and the purpose of the study.

Shadowed Data: It is the information provided by the participants, during interviews, about the experience of their close associates which are related to the issues of the study.

Theoretical Sampling: It is the process of collecting, coding, and analyzing data simultaneously in the grounded theory method to generate a theory.

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Are We There Yet? Data Saturation in Qualitative Research

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Are We There Yet? Data Saturation in Qualitative Research

Abstract

Failure to reach data saturation has an impact on the quality of the research conducted and hampers content validity. The aim of a study should include what determines when data saturation is achieved, for a small study will reach saturation more rapidly than a larger study. Data saturation is reached when there is enough information to replicate the study when the ability to obtain additional new information has been attained, and when further coding is no longer feasible. The following article critiques two qualitative studies for data saturation: Wolcott (2004) and Landau and Drori (2008). Failure to reach data saturation has a negative impact on the validity on one's research. The intended audience is novice student researchers.

Keywords

Data Saturation, Triangulation, Interviews, Personal Lens, Bias

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Failure to reach data saturation has an impact on the quality of the research conducted and hampers content validity. The aim of a study should include what determines when data saturation is achieved, for a small study will reach saturation more rapidly than a larger study. Data saturation is reached when there is enough information to replicate the study when the ability to obtain additional new information has been attained, and when further coding is no longer feasible. The following article critiques two qualitative studies for data saturation: Wolcott (2004) and Landau and Drori (2008). Failure to reach data saturation has a negative impact on the validity on one's research. The intended audience is novice student researchers. Keywords: Data Saturation, Triangulation, Interviews, Personal Lens, Bias.

Failure to reach data saturation has an impact on the quality of the research conducted and hampers content validity (Bowen, 2008; Kerr, Nixon, & Wild, 2010). Students who design a qualitative research study come up against the dilemma of data saturation when interviewing study participants (O'Reilly & Parker, 2012; Walker, 2012). In particular, students must address the question of *how many interviews are enough to reach data saturation* (Guest, Bunce, & Johnson, 2006). A frequent reference for answering this question is Mason (2010), who presented an extensive discussion of data saturation in qualitative research. However, the paper's references are somewhat dated for doctoral students today, ranging in dates from 1981-2005 and consisting mainly of textbooks. Although the publication date of the article is 2010, this is one of those types of articles that have older data masquerading as newer. The Mason (2010) article was recently updated to reflect a more contemporary date; however, the article did not update the content other than a few more recent citations. That is not to say that the article has no merit; instead, the concepts behind data saturation remain universal and timeless. Mason has a talent for explaining the difficult in terms that most can understand. Moreover, many students use Mason's work as support for their proposals and studies. To be sure, the concept of data saturation is not new and it is a universal one, as well. What is of concern is that Mason supported his assertions with textbooks and dated sources.

When deciding on a study design, the student should aim for one that is explicit regarding how data saturation is reached. Data saturation is reached when there is enough information to replicate the study (O'Reilly & Parker, 2012; Walker, 2012), when the ability to obtain additional new information has been attained (Guest et al., 2006), and when further coding is no longer feasible (Guest et al., 2006).

One Size Does Not Fit All

The field of data saturation is a neglected one. The reason for this is because it is a concept that is hard to define. This is especially problematic because of the many hundreds if not thousands of research designs out there (Marshall & Rossman, 2011). What is data saturation for one is not nearly enough for another. Case in point: ethnography is known for a great deal of data saturation because of the lengthy timelines to complete a study as well as the multitude of data collection methods used. In contrast, meta-analysis can be problematic

because the researcher is using already established databases for the information; therefore, the researcher is dependent upon prior researchers reaching data saturation. In the case of a phenomenological study design, the point at which data saturation has been attained is different than if one were using a case study design. To be sure, the use of probing questions and creating a state of *epoché* in a phenomenological study design will assist the researcher in the quest for data saturation; however, a case study design parameters are more explicit (Amerson, 2011; Bucic, Robinson, & Ramburuth, 2010).

There is no *one-size-fits-all* method to reach data saturation. This is because study designs are not universal. However, researchers do agree on some general principles and concepts: no new data, no new themes, no new coding, and ability to replicate the study (Guest et al., 2006). When and how one reaches those levels of saturation will vary from study design to study design. The idea of data saturation in studies is helpful; however, it does not provide any pragmatic guidelines for when data saturation has been reached (Guest et al., 2006). Guest et al noted that data saturation may be attained by as little as six interviews depending on the sample size of the population. However, it may be best to think of data in terms of rich and thick (Dibley, 2011) rather than the size of the sample (Burmeister, & Aitken, 2012). The easiest way to differentiate between rich and thick data is to think of *rich* as quality and *thick* as quantity. Thick data is a lot of data; rich data is many-layered, intricate, detailed, nuanced, and more. One can have a lot of thick data that is not rich; conversely, one can have rich data but not a lot of it. The trick, if you will, is to have **both**.

One cannot assume data saturation has been reached just because one has exhausted the resources. Again, data saturation is not about the numbers *per se*, but about the depth of the data (Burmeister & Aitken, 2012). For example, one should choose the sample size that has the best opportunity for the researcher to reach data saturation. A large sample size does not guarantee one will reach data saturation, nor does a small sample size—rather, it is what constitutes the sample size (Burmeister & Aitken, 2012). What some do not recognize is that no new themes go hand-in-hand with no new data and no new coding (O'Reilly & Parker, 2012). If one has reached the point of no new data, one has also most likely reached the point of no new themes; therefore, one has reached data saturation. Morse, Lowery, and Steury (2014) made the point that the concept of data saturation has many meaning to many researchers; moreover, it is inconsistently assessed and reported. What is interesting about their study results is that the authors noted that in their review of 560 dissertations that sample size was rarely if ever chosen for data saturation reasons. Instead, the sample size was chosen for other reasons (Morse et al., 2014).

Data Collection Methods to Reach Saturation

During the study, a novice researcher can conduct the research in a manner to attain data saturation (Francis et al., 2010; Gerring, 2011; Gibbert & Ruigrok, 2010; Onwuegbuzie, Leech, & Collins, 2010) by collecting rich (quality) and thick (quantity) data (Dibley, 2011), although an appropriate study design should also be considered. One could choose a data collection methodology that has been used before (Porte, 2013) that demonstrated data saturation had been reached; moreover, one would correctly document the process as evidence (Kerr et al., 2010).

Interviews are one method by which one's study results reach data saturation. Bernard (2012) stated that the number of interviews needed for a qualitative study to reach data saturation was a number he could not quantify, but that the researcher *takes what he can get.* Moreover, interview questions should be structured to facilitate asking multiple participants the same questions, otherwise one would not be able to achieve data saturation as it would be

a constantly moving target (Guest et al., 2006). To further enhance data saturation, Bernard (2012) recommended including the interviewing of people that one would not normally consider. He cautioned against the *shaman effect*, in that someone with specialized information on a topic can overshadow the data, whether intentionally or inadvertently (Bernard, 2012). Finally, care should be taken when confronting gatekeepers at the research site who may restrict access to key informants (Holloway, Brown, & Shipway, 2010) which would hamper complete data collection and data saturation.

Another example of data collection methods would be a focus group session. A focus group interview is a flexible, unstructured dialogue between the members of a group and an experienced facilitator/moderator that meets in a convenient location (Brockman et al., 2010; Jayawardana & O'Donnell, 2009; Packer-Muti, 2010). The focus group interview is a way to elicit multiple perspectives on a given topic but may not be as effective for sensitive areas (Nepomuceno & Porto, 2010). This method drives research through *openness*, which is about receiving multiple perspectives about the meaning of truth in situations where the observer cannot be separated from the phenomenon (Natasia & Rakow, 2010). This concept is found in interpretive theory wherein the researcher operates thorough a belief in the multiplicity of peoples, cultures, and means of knowing and understanding (Natasia & Rakow, 2010).

For focus groups it is recommended that the size of the group include between six and 12 participants, so that the group is small enough for all members to talk and share their thoughts, and yet large enough to create a diverse group (Lasch et al., 2010; Onwuegbuzie et al., 2010). Focus groups have limitations pertaining to a propensity for groupthink in that members pressure others to conform to group consensus (Dimitroff, Schmidt, & Bond, 2005). Furthermore, a focus group session that elicits useful information can be dependent on the skills of the facilitator as well as the failure to monitor subgroups with the focus group (Onwuegbuzie et al., 2010). Therefore, a focus group is one way to elicit a number of perspectives on a given topic to reach data saturation if one had a large pool of potential participants to draw from. This would be appropriate if one were already conducting individual interviews with a small number of participants and one would like to get a group perspective about the phenomenon. For example, after interviewing five senior executive level leaders individually, one could interview 5-8 more senior executive level leaders as a group. To be sure, there are individual perspectives that should be explored as well as a group perspective that could also be relevant. It is a good strategy to use to gather a great deal of data in a short amount of time.

Other methods to ensure that data saturation has been achieved include having the researcher construct a saturation grid, wherein major topics are listed on the vertical and interviews to be conducted are listed on the horizontal (Brod, Tesler, & Christiansen, 2009). Further recommendations include the possibility of having a second party conduct coding of transcripts to ensure data saturation has been reached (Brod et al., 2009). Additionally, the researcher should avoid including a one-time phenomenon that elicits the dominant mood of one participant (Onwuegbuzie, Leech, Slate, Stark, & Sharma, 2012) that could hamper the validity and transferability of the study results. At the end of the study, if new information is obtained in the final analysis, then further interviews should be conducted as needed until saturation is reached (Brod et al., 2009; Rubin & Rubin, 2012).

The Researcher's Personal Lens and Data Saturation

The role of the researcher is an important part of a study. One of the challenges in addressing data saturation is about the use of a personal *lens* primarily because novice researchers (such as students) assume that they have no bias in their data collection and may not recognize when the data is indeed saturated. However, it is important to remember that a

participant's as well as the researcher's bias/worldview is present in all social research, both intentionally and unintentionally (Fields & Kafai, 2009). To address the concept of a *personal lens*, in qualitative research, the researcher is the data collection instrument and cannot separate themselves from the research (Jackson, 1990) which brings up special concerns. To be clear here, the researcher operates between multiple worlds while engaging in research, which includes the cultural world of the study participants as well as the world of one's own perspective (Denzin, 2009). Hence, it becomes imperative that the interpretation of the phenomena represent that of participants and not of the researcher (Holloway et al., 2010) in order for the data to be saturated. Hearing and understanding the perspective of others may be one of the most difficult dilemmas that face the researcher. The better a researcher is able to recognize his/her personal view of the world and to discern the presence of a *personal lens*, the better one is able to hear and interpret the behavior and reflections of others (Dibley, 2011; Fields & Kafai, 2009) and represent them in the data that is collected. How one addresses and mitigates a personal lens/worldview during data collection and analysis is a key component for the study. It is important that a novice researcher recognizes their own personal role in the study and mitigates any concerns during data collection (Chenail, 2011). Part of the discussion should address how this is demonstrated through understanding when the data is saturated by mitigating the use of one's personal *lens* during the data collection process of the study (Dibley, 2011). Hence, a researcher's cultural and experiential background will contain biases, values, and ideologies (Chenail, 2011) that can affect when the data is indeed saturated (Bernard, 2012).

The Relationship Between Data Triangulation and Data Saturation

To reiterate, data saturation can be attained in a number of methods; however, a researcher should keep in mind the importance of data triangulation (Denzin, 2009, 2012). To be sure, the application of triangulation (multiple sources of data) will go a long way towards enhancing the reliability of results (Stavros & Westberg, 2009) and the attainment of data saturation. Denzin (2009) noted that triangulation involves the employment of multiple external methods to collect data as well as the analysis of the data. To enhance objectivity, truth, and validity, Denzin (2009) categorized four types of triangulation for social research. Denzin (2009) suggested data triangulation for correlating people, time, and space; investigator triangulation for correlating the findings from multiple researchers in a study; theory triangulation for using and correlating multiple theoretical strategies; and methodological triangulation for correlating data from multiple data collection methods. Multiple external analysis methods concerning the same events and the validity of the process may be enhanced by multiple sources of data (Fusch, 2008, 2013; Holloway et al., 2010).

There is a direct link between data triangulation and data saturation; the one (data triangulation) ensures the other (data saturation). In other words, data triangulation is a method to get to data saturation. Denzin (2009) argued that no single method, theory, or observer can capture all that is relevant or important. Denzin (2006), however, did state that triangulation is the method in which the researcher "must learn to employ multiple external methods in the analysis of the same empirical events" (p. 13). Moreover, triangulation is the way in which one explores different levels and perspectives of the same phenomenon. It is one method by which the validity of the study results are ensured. Novice researchers in particular should keep in mind that the triangulation of data can result in sometimes contradictory and inconsistent results; however, it is up to the researcher to make sense of them for the reader and to demonstrate the richness of the information gleaned from the data (O'Reilly & Parker, 2012). Saturation is important in any study, whether quantitative, qualitative, or mixed methods. Methodological triangulation goes a long ways towards

ensuring this (Bekhet & Zauszniewski, 2012) through multiple data sources. Methodological triangulation ensures that that data is rich in depth. Denzin (2012) made the point that it is somewhat like looking through a crystal to perceive all the facets/viewpoints of the data. Moreover, he posited that triangulation should be reframed as *crystal refraction* (many points of light) to extrapolate the meaning inherent in the data. This is especially important in ethnographic research where one is expected to have multiple data collection techniques to find the meaning that participants use to frame their world (Forsey, 2010). One does not necessarily triangulate; one *crystallizes* thorough recognizing that there are many sides from which to approach a concept (Richardson & Adams St. Pierre, 2008), although this distinction may be merely the same concept with a different label.

Two Examples

Rich and thick data results may not represent data saturation, particularly when it comes to a type of study known as an *auto-ethnography* (Wolcott, 2004). Auto-ethnography was coined by David Hayano (1979) to describe a study where the researcher was an insider member of the group being studied; in his case it was a group of people he was acquainted with who gathered to play cards (Wolcott, 2004). This is in contrast to the traditional role played by anthropologists where they are on the outskirts of a group, as "a peripheral participant" (Wolcott, 2004, p. 98). Renowned anthropologist H. F. Wolcott wrote about the confusion between the terms auto-ethnography and ethnographic autobiography (Wolcott, 2004). Wolcott used his seminal study of a sneaky kid, a seminal work in auto-ethnographic studies, to illustrate how the term auto-ethnography morphed from a meaning about the researcher as a part of a studied group to a term illustrating a personal history as biography (Wolcott, 2004). The term auto-ethnography in the classic sense came to describe the "narratives of the self" (Wolcott, 2004, p. 99), as opposed to more contemporary definitions such as evocative autoethnography which offers one an opportunity to reflect on personal experience or analytic autoethnography which uses personal data to address a broader social phenomenon (Anderson, 2006). Therefore, as Wolcott stated, an ethnographic autobiography is "a life story told to an anthropologist" (Wolcott, 2004, p. 93). One can see the apparent data saturation issues present in this type of study, regardless of the detail, as the data is limited to self-reported data presented by the subject. In particular, upon review of Wolcott's study of the sneaky kid, one notes the absence of collaborating data about the life history of the subject, including court records or data provided by third parties associated with the subject. While the authors of this article harbor great respect for Wolcott and his seminal work in ethnography, they are also somewhat uncomfortable with this type of research due to the lack of methodological triangulation.

In contrast to Wolcott's study of the sneaky kid, Landau and Drori's (2008) qualitative study included data triangulation as evidenced by multiple sources of data and analysis. Their research centered on an R & D laboratory in Israel that had recently experienced a change in direction from science-based research to profit-making production (Landau & Drori, 2008). The researchers conducted a three-year ethnographic field study using participant observation, induction, interpretation, close proximity and unmediated relationships (Landau & Drori, 2008). They conducted their work between 1996 and 1999 and based it on an inductive grounded theory case study analysis that used both specific and general questions asked of participants to determine viewpoints, and included a cross section of the organization's employees including scientists and managers (Landau & Drori, 2008). They found that confrontational sense-making resulted from the conflict between scientists and mangers' efforts to construct a new organization culture from the old of pure science to the new of profitability (Landau & Drori, 2008). The viewpoints were perceived as mutually

exclusive at the beginning of the process, until management allowed "both to save face by promoting sense-making accounts sufficiently blurred to enable each side to admit its own cultural rationale" (Landau & Drori, 2008, p. 713) for the lab's existence. Mixed sense-making tolerates the side-by-side existence of both past and present into a cultural pool that allows an organization to move forward when choosing strategies to address change (Landau & Drori, 2008).

Are We There Yet?

In C.S. Forester's book *Beat to Quarters*, the author describes the leadership abilities of his hero, as …"like a calculating machine, judging wind and sea, time and distance…" (p. 160), as an illustration of how Horatio Hornblower was able to so effectively wage his English sea war against the Napoleonic juggernaut in the early 1800s. So, too, must qualitative researchers account for multiple sources of data and perspectives to insure that their study results demonstrate validity through data saturation, so that they too may hear of their research…"I am both astonished and pleased at the work you have accomplished" (p. 167).

It can be said that failure to reach data saturation has a negative impact on the validity on one's study results (Kerr et al., 2010; Roe & Just, 2009); however, there is no *one-size-fits-all* method to reach data saturation; moreover, *more* is not necessarily better than *less* and vice versa. There are, rather, data collection methods that are more likely to reach data saturation than others, although these methods are highly dependent on the study design. To be sure, the *concept* of data saturation may be easy to understand; the *execution* is another matter entirely (Guest et al., 2006). When deciding on a study design, the student should aim for one that is explicit regarding how data saturation is reached. Data saturation is reached when there is enough information to replicate the study (O'Reilly & Parker, 2012; Walker, 2012), when the ability to obtain additional new information has been attained (Guest et al., 2006), and when further coding is no longer feasible (Guest et al., 2006). Rich and thick data descriptions obtained through relevant data collection methods can go a long ways towards assisting with this process when coupled with an appropriate research study design that has the best opportunity to answer the research question.

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The Art of Coding and Thematic Exploration in Qualitative Research

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[Abstract] Coding in qualitative research is comprised of processes that enable collected data to be assembled, categorized, and thematically sorted, providing an organized platform for the construction of meaning. While qualitative research orientations differ theoretically and operationally relative to managing collected data, each employs a method for organizing it through coding data. Coding methods employ processes that reveal themes embedded in the data, in turn suggesting thematic directionality toward categorizing data through which meaning can be negotiated, codified, and presented. Coding is a key structural operation in qualitative research, enabling data analysis and successive steps to serve the purpose of the study.

This paper focuses on identifying, defining, and describing the coding techniques available to researchers, the function of each stage in the coding method, the iterative review process associated within the coding cycle, and the transition from codes to themes toward constructing meaning from the data. In addition, it references/provides examples of manual coding practices and identifies qualitative research software available for coding.

[Keywords] Coding; thematic exploration; qualitative research

> *Not everything that counts can be counted, and not everything that can be counted counts.*
>
> **----Albert Einstein**

Introduction

Qualitative research provides opportunities to locate the genesis of a phenomenon, explore possible reasons for its occurrence, codify what the experience of the phenomenon meant to those involved, and determine if the experience created a theoretical frame or conceptual understanding associated with the phenomenon. While quantitative research methods seek to count and provide statistical relevance related to how often a phenomenon occurs and then generalize the findings, qualitative research methods provide opportunities to delve into the phenomenon and determine its meaning while and after it occurs. Regardless of the research approach, the methodology employed for data collection and organization must be clear and repeatable, leading to and enabling data analysis. As in any research design, if its data collection and organization methods lack rigor, analysis can be impeded, in turn minimizing the value of outcomes. This approach supports the evolution of constructing meaning from the data, in turn enabling contributions to the related literature and enhancing our understanding of the world.

Context

Authors writing about qualitative research methods1–3 indicate that the evolution of qualitative research has migrated through decades of "methodological consolidation complemented by a concentration on procedural questions in a growing research practice" (Flick, 2009, p.20). Philosophical and methodological yields from this migration are the different orientations and procedures associated with conducting qualitative research. Given the plethora of qualitative research formats available, researchers need to decide which methodological approach will most effectively

enable their study. "Qualitative research is not based on a unified theoretical and methodological concept. The variety of approaches results from different developmental lines in the history of qualitative research, which evolved partly in parallel and partly in sequence" (Flick, 2009, p. 306).

As qualitative research has evolved and methodologies for collecting and organizing data have matured, specific strategies and structures for managing data in these areas have emerged and become common practice. A key data organizing structure in qualitative research is coding. "A code in qualitative inquiry is most often a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data" (Saldafia 2009, p.3). Initially, coding began as a progressive three-part schema; First, Second and Third level coding guided by the formula "from codes and categories to theory" (Saldafia 2009, p. 4). From these early coding strategies, additional coding strategies evolved associated with the emergent types of qualitative research methods (e.g., Phenomenological, Grounded Theory). This paper reviews the coding strategies associated with qualitative research using Grounded Theory method as an example for demonstrating the uses of the three-step coding process; open, axial, and selective coding.

Brief Historical Perspectives

The Ground Theory Method (GTM) of qualitative research emerged from the work of Barney Glaser and Anselm Strauss, aligned with the Chicago School of symbolic interactionism, which rose to prominence in the early part of the twentieth century (Glaser, 1967). In their seminal work "The discovery of grounded theory: Strategies for qualitative research," the authors suggested a pluralist and flexible approach to data coding (Strauss, 1998). "Our principal aim is to stimulate other theorists to codify and publish their own methods for generating theory and join us in telling those who have not yet attempted to generate theory that it is not a residual chore in this age of verification" (Glaser, 1967. p. 8).

While encouraging researchers towards a "pluralist and flexible" orientation to coding and to original methods for "generating theory," the reference to "not a residual chore in this age of verification" is significant, as it is a reference to the quantitative research as being the dominant research method of the time. This initial philosophic frame suggests that researchers employing qualitative research methods, in this case GTM, should not engage in data organizing strategies indiscriminately. Instead, they should apply guiding principles that intentionally enable them to "codify and publish their own methods for generating theory" (Strauss, 1998, p.189). The focus on articulating a clear methodological framework that is both rigorous and able to be replicated, suggests a researcher engaged in qualitative research is using a viable research method. "The pluralistic nature of GTM [does not] mean that researchers can do pretty much whatever they want…there are certain principles about which grounded theory, proponents concur and as long as these principles are kept in mind, the details of the procedure can be modified to suit a researcher's needs" (Larossa, 2005, p. 840).

In this context, the GTM was one of the first qualitative methods to have a systematic approach for codifying and categorizing data in order to generate theory. As a result, researchers were provided with the methodological means to construct meaning from research findings through a three-phase coding method. The coding method enabled a progressive and verifiable mechanism for establishing codes, their origins, relationships to each other, and integration resulting in themes used to construct meaning.

The construction of meaning from collected data is the result of the progressive data coding process. In order for researchers to generate theory, researchers need to evidence employing an analytic approach and rationale methodological decisions. "Through explicating their decisions, grounded theorists gain control over their subject matter and their next analytic or methodological move. The construction of the process, as well as the analytic product, is emergent theory" (Charmaz, 2008, p. 408).

Open, axial and selective coding of collected data results in the creation of theory, leading the researcher to construct deeper theoretical meaning. This method of coding provides researchers with nuanced access to study informants' thoughts, perspectives, and reactions to study topics. Coding enables informant data to be gathered and analyzed relative to "what they do, how they do it, and why they do it interacting in the research setting" (Charmaz, 2008, p. 408).

Coding

Qualitative research generally and Grounded Theory Methods specifically is an inductive, not a deductive, approach to qualitative research. While deductive research focuses on casualty and testing theory, inductive research focuses on generating theory from collected data. In the GTM approach, data collection activities (e.g. interview, observation, and artifact review) requires the researcher to be present and be aware of the dynamic nature of the data, its thematic connectivity, intersectionality, and emergence toward theory creation. "Data collection, analysis and resultant theory generation has a reciprocal relationship…it requires a constant interplay between the researcher and the data" (Charmaz, 2008, p. 47). Central to the coding process is ensuring that coding procedures are defined, rigorous, and consistently applied in order to conform with validity and reliability standards associated with qualitative research. Historically, this orientation of insisting on rigorous data coding procedures is traceable to seminal work in qualitative research, indicating that "joint collection, coding and analysis of data is the underlying operation [toward] the generation of theory" (Glaser, & Strauss, 1967, p. 43).

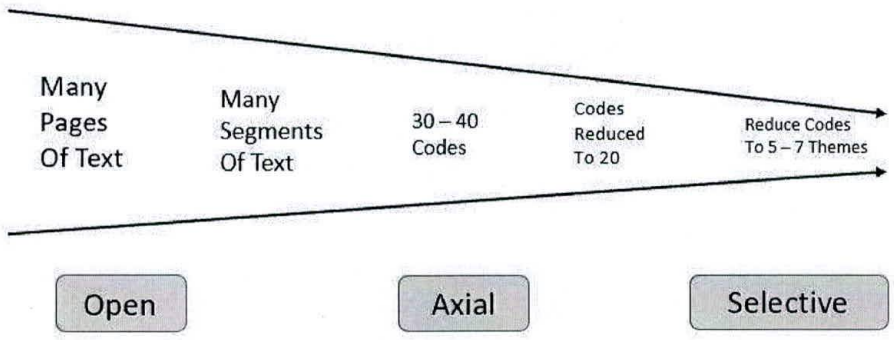

Figure 1. Overview of coding process: Open, Axial and Selective Coding

Recognizing the interdependent relationship among data organization, categorization, and theory development construction of meaning, coding plays a pivotal role in facilitating the researcher's ability to advance effectively the research process. "Coding is oriented around the central concept of [seeking] to represent the interplay of subjects' and researcher's perceptions of the nature and dimensions of phenomena under study" (Douglas, 2003, p. 48).

Importantly, the open, axial, and selective coding strategy enables a cyclical and evolving data loop in which the researcher interacts, is constantly comparing data and applying data reduction, and consolidation techniques. As the coding process progresses, its dynamic function and nonlinear directionality enables essential themes to be identified, codified, and interpreted in the service of a research study's focus and contributes to the associated literature. This cyclical process is both an art and science, requiring the researcher to understand intimately the data by continuously reading and rereading the collected data in order for theory to evolve.

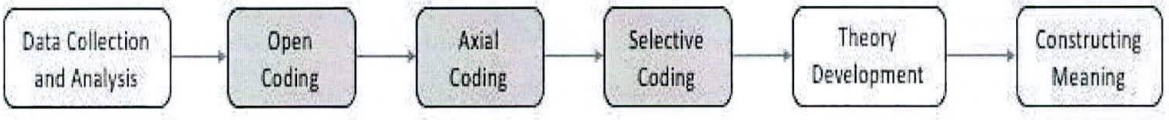

Figure 2. Linear Process for Qualitative Research

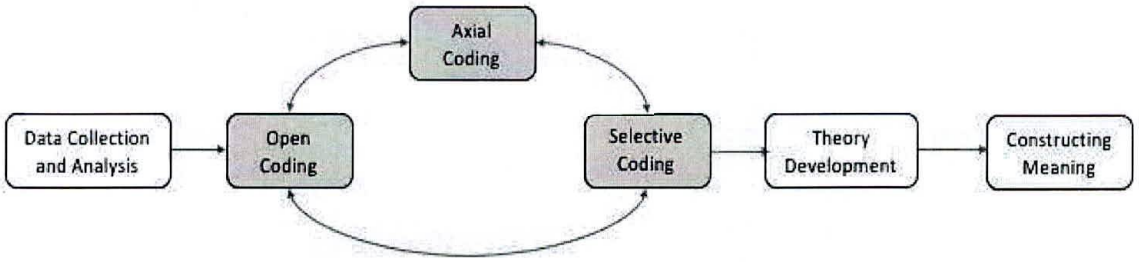

Figure 3. Non-Linear Process: Qualitative Research

Note. The process evolves into a cyclical process when moving between the three coding methods. The researcher must treat these as a non-linear.

Open Coding

Open coding is the first level of coding. In open coding, the researcher is identifying distinct concepts and themes for categorization. The first level of data is organized by creating initial broad thematic domains for data assemblage. "The first step [open coding] aims at expressing data and phenomena in the form of concepts. Units of meaning classifying expressions (single words, short sequences of words) in order to attach annotations and "concepts" (Flick, 2009, p. 307). In open coding, this process was termed the concept-indicator model. In brief, the concept-indicator model used constant comparison of [textual] indicators and focused on comparing regularly occurring textual material. This approach was accompanied by the ongoing coding of themes as an indicator of a concept, always comparing it to previous indicators that had been similarly coded (Saldafia, 2009).

In practice, the researcher needs to sift through informant's responses and organize similar words and phrases, concept-indicators, in broad initial thematic domains. For example, "indicators are symbols or conventional signs, thus a man and woman are concepts. So are love, mate selection, divorce, death, and depression" (Strauss, 1998. p.841).

Central to the efficacy of open coding is approaching the thematic fragments and coalescing concepts identified during data collection in an organized and systematic way. Prior to the use of qualitative research software programs, organizing data for open coding required a multifaceted research skill set. For example, researchers would read and re-read interview transcriptions, field notes, and associated data sources involved in the data collection searching for thematic connectivity leading to thematic patterns. Next, the researcher would color code aligned themes, cut the themes out (producing small paper fragments with the themes), and adhere the paper fragments on index cards in preparation for more precise assessment and axial coding. While this approach was subject to possible errors in overlooking or miscoding them, this rudimentary data organizing strategy could be a relatively effective process enabling open coding.

Today, researchers have the option of using qualitative software to enable the same process using complex data analysis tools. The advent of the use of qualitative software has expanded the ways that researchers can work through the coding cycles. In addition, the more advanced qualitative software packages provide opportunities for statistical analysis overlaying the coding process. The researcher still must move through each phase of coding; the software simply supports an easier capture of the researchers' coding and construction of meaning.

Table 1

Qualitative Software

Software	Price: Education	Operating Systems		Statistics	Mixed Methods
		IOS	Windows		
MAXQDA Plus 2018	Faculty: $565.00 Student: $99 (24 months)	√	√	Pro Version: Correlation, Descriptive Statistics, Anova	√
Nvivo Plus	Faculty: $600.00 Student: $85 (24 months)	√	√	Export to SPSS	√
Atlas.ti	Faculty: $670.00 Student: $99 (24 months)	√	√	No	√
QDA Miner	Faculty: $595.00 Student: No	√	√	No	√
HyperResearch	Faculty: $499.00 Students: $199.00	√	√	No	√
Quirkos	Faculty: $340.00 Student: $69.00	√	√	No	√
Dedoose	$10.95 per month $131.40 (12 months)	Web	Web	No	√
webQDA	$50.00 (90 days) $165.00 (12 months)	Web	Web	No	√

Once the researcher determines that a theme has emerged and is recognized, it would be provided with a code. The object is "to arrange things in a systematic order, to make something part of a system or classification…this permits data to be "segregated, grouped, regrouped and relinked in order to consolidate meaning and explanation" (Lincoln, 1985, p.21).

Determining a code for emergent themes from the data can be more art than science. For example, as themes or patterns coalesce, there may be a variety of codes that could effectively corral the themes. However, providing a code prematurely, prior to fully understanding a theme's content and directionality, could hinder its evolving associations with other themes. One approach to choosing a code is employing "classification reasoning plus tacit and intuitive senses to determine which data "look alike" and "feel alike" when grouping them together" (Lincoln, 1985, p.347). Identifying a sufficiently developed theme and determining an appropriate code requires attention to thematic association and a subjective sense of a code's accurate representation of the essence of a theme.

Open coding in qualitative research presents opportunities for sub-coding data. Determining what data to capture and how to display it is a critical aspect of the research design. Data presentation in open coding can be managed in numerous ways. Often, the form of presentation reflects the processes of its collection. For example, words, phrases, or sentence fragments of different emergent themes can be listed on different pages, and field notes counting the number of times a word was repeated in an interview could be graphed or relevant characteristics from photographs of an informant group could be referenced in a multi-photo archive. "The result of open coding should be a list characterizing codes and categories attached to the text and supported by code notes that were produced to explain the content

of codes. These notes could be striking observations and thoughts that are relevant to the development of theory" (Flick, 2009, p. 310).

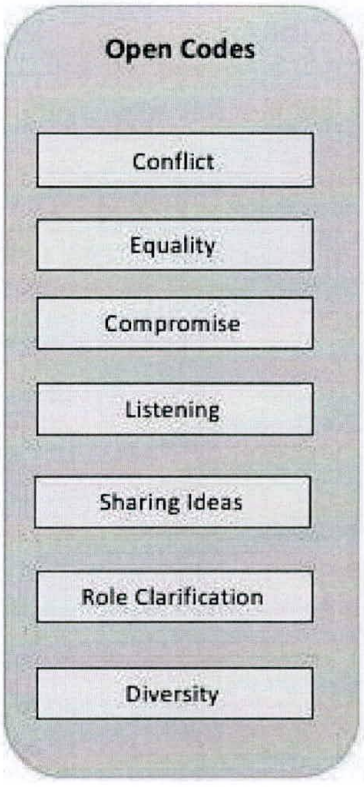

Figure 4. Open Coding: Thematic material identified in reviewing collected data that could serve as categories in axial coding.

A practical approach to determining codes is using the "*5W-1H*" (e.g. who, what, where, when, when, and how) questions as a foundational way for exploring and examining data in order to "list characterizing codes and categories attached to the text" (Flick, 2009, p. 311). This approach enables the researcher to parse and organize thematically similar data so that unique codes can be applied. Code selection can be used in open, axial, and selective coding in order to identify foundational thematic content and directionality (Flick, 2009). Operationally, there are various strategies for displaying data in open coding. Therefore, researchers can be creative and innovative in designing data open coding mechanisms that will best enable their research activities.

Axial Coding

Axial coding is the second level of coding. In contrast to open coding, which focuses on identifying emergent themes, axial coding further refines, aligns, and categorizes the themes. With the completion of open coding and transition to axial coding, collected data can be sifted, refined, and categorized with the goal of creating distinct thematic categories in preparation for selective coding. "Axial coding identifies relationships between open codes, for the purpose of developing core codes. Major (core) codes emerge as aggregates of the most closely interrelated (or overlapping) open codes for which supporting evidence is strong" (Strauss, 1998, p. 109). In order to achieve this organizing objective, researchers need to engage in continuous analysis, cross referencing, and refining theme categorization. There are three refinement activities associated with axial coding that enable and advance effective content categorization.

First is possessing a clear understanding of the analytic methods used in refining data and category

construction. As the researcher reviews the thematic material collected through open coding, the materials must be examined in the context of inductive and deductive analysis. As stated earlier in this paper, deductive reasoning tests theory by collecting and examining empirical data to determine if it is true, while inductive reasoning seeks to construct theory from data collected and analyzed with the goal of explaining research findings. The process of analyzing data is dynamic, requiring the researcher to consider a multivariate field of possible influencers relative to findings. Using inductive and deductive approaches to data analysis can maximize analytic acuity and enable precise thematic categorization. The categories that are finalized from axial coding serve as the axis point or hub in axial coding. For example, a wooden wheel metaphor is used to describe axial coding by locating key categories as the hub and subcategories to the spokes of the wheel (Glaser, & Strauss, 1967). Another description of axial coding is the "Six C's Model." This model encourages categorization using provided key perspectives for further organizing and categorizing data through "causes, contexts, contingencies, consequences, covariance, and conditions" (Larossa, 2005, p.98). While these coding activities are associated with qualitative research, considering relevant deductive approaches to testing theory remains an important data comparison strategy facilitating continuous review, reconsideration, and reflection.

Second is the constant comparison method. The constant comparison method is a data organizing and refining activity. While there are differing approaches to implementing the constant comparison method, its focus is to compare continually data collected, emergent themes, and their coding in order to continually create, refine, and newly create categories in preparation for selective coding. Thematic comparison and analysis are central to axial coding, as the critical focus is on organizing themes into cogent and comprehensive categories. In axial coding, as well as the other coding types, the researcher must understand the function of the coding and associated analytic activities in order to make informed research designs. "Bringing process into the analysis is an important part of any grounded theory study" (Strauss, 1998, p. 163). This is an important understanding relative to the relationship between coding and analysis as analysis facilitates coding.

Third is "line-by-line" coding. In line-by-line coding, each textual line of an interview or document is scrutinized with the goal of maintaining the researcher's focus on the text. Through this approach, the researcher can deeply engage the text, and, in turn, recognize and codify nuances and discrete thematic connectivity with other themes. "Researchers do not want to impose a pre-existing framework onto the data, but rather to let new themes emerge from it. Through keeping 'close to the data' continuously sifting through themes, idea fragments and seemingly unrelated utterances, data categories can become thematically stabilized, defined and differentiated" (Charmaz, 2014, p. 80). Remaining "close to the data" requires the researcher to immerse herself in the text, explore its nuances and surrender biases. By progressing engaging data "line-by-line," a rhythm or cadence of analysis occurs, assisting the researcher in being methodical and, perhaps, pedantically focused on identifying textual subtleties fueling the construct of meaning. Through employing inductive and deductive reasoning, the constant comparison method, and line-by-line coding, the integrated essence of the thematic material can be identified and categorized.

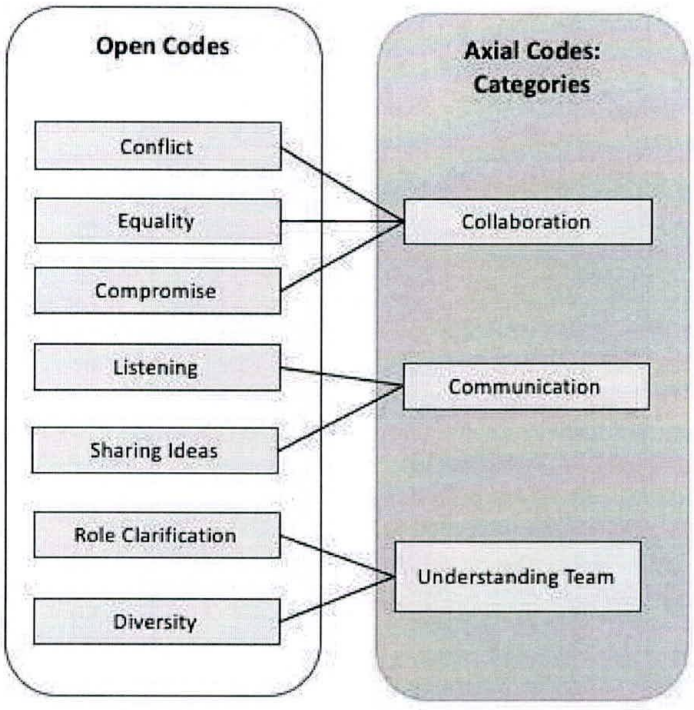

Figure 5. Axial Codes: Creating categories from open codes

In open coding, themes are being developed: an informant's musing, a hand-written note in the margin of a memo, or an elaborate monologue from a spontaneous utterance from an unscheduled actor. However, the interrelatedness of the thematic material remains unexplored and unanalyzed. In axial coding, the relationships among themes are explicitly stated, examined, and categorized. "If the development of theory rests heavily though not entirely on explanation and if explanation rests on how variables and their interrelatedness are empirically or logically established, then axial coding is the phase in which research begins to fulfill its theoretical promise" (Bengston, 2006, p.28).

Selective Coding

Selective coding is the third level of coding. It enables the researcher to *select* and integrate categories of organized data from axial coding in cohesive and meaning-filled expressions. "Selective coding continues the axial coding at a higher level of abstraction [through] actions that lead to an elaboration or formulation of the story of the case" (Flick, 2009, p. 310). Central to enabling the story or case to emerge from the data categories is the process of enabling further refinement of the data, selecting the main thematic category, and then in a systematic manner aligning the main theme to other categories that have been selectively coded. "The conceptualization of the yield from the selective coding as a 'case' or 'story' is significant as it provides researchers with flexible and multi-type vehicles for codifying and presenting study results" (Strauss, 1998, p. 158). This approach to data framing enables the researcher to work continually toward thematic specificity and, in turn, theory creation. In selective coding, degrees of causality or predictability can emerge from the thematic refining process, allowing the researcher to identify sets of circumstances in which certain responses will elicit responses that suggest certain circumstances receive unique and differentiated responses. With the work of selective coding done, the researcher can move toward developing theory and ultimately constructing meaning.

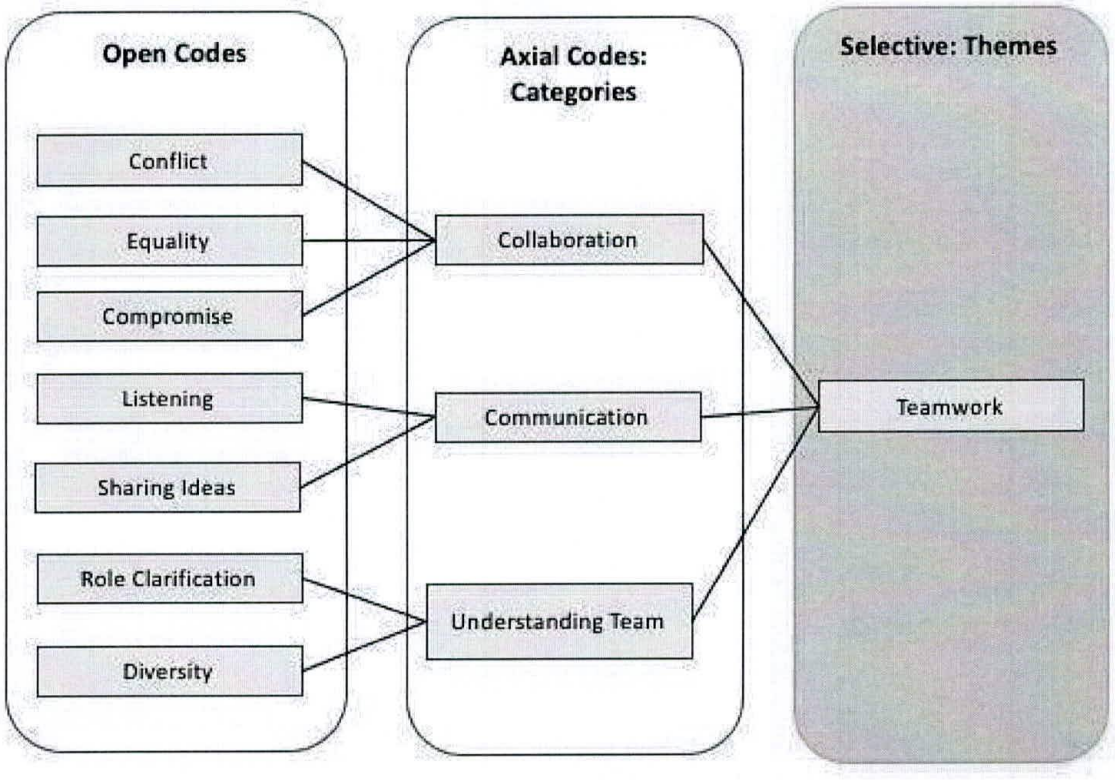

Figure 6. Open Codes to Selective Theme

Note: Typically, numerous thematic fragments in the collected data can be captured in open coding, enabling as if thematic materials to be integrated forming key categories using axial coding that are then further refined to one unique theme in selective coding. Frequently, research studies yield numerous selective codes; enabling researchers develop theory resulting in a theoretical framework and the ability to construct meaning.

Selective coding is a uniquely challenging phase of the data collection process of the research design in that it influences not only what theoretical constructs emerge, but also how meaning is created through presentation, impacting the reception of the findings. For example, if the meaning of the findings is expressed in the form of a case of story, the presentation can vary in form and style. Authors write about the format when finalizing the outcome of selective coding process. "Some researchers may prefer to tell idiographic stories, with anecdotal indicators fleshing out the particulars, while others may lean toward theoretical stories, accounts of how a complex of variables are interrelated" (Larossa, 2005, p. 201). The outcome of selective coding enables researchers to craft case stories that accurately and powerfully present the sum of the progressive coding process. Selective coding fuels expression and facilitates the construction of meaning.

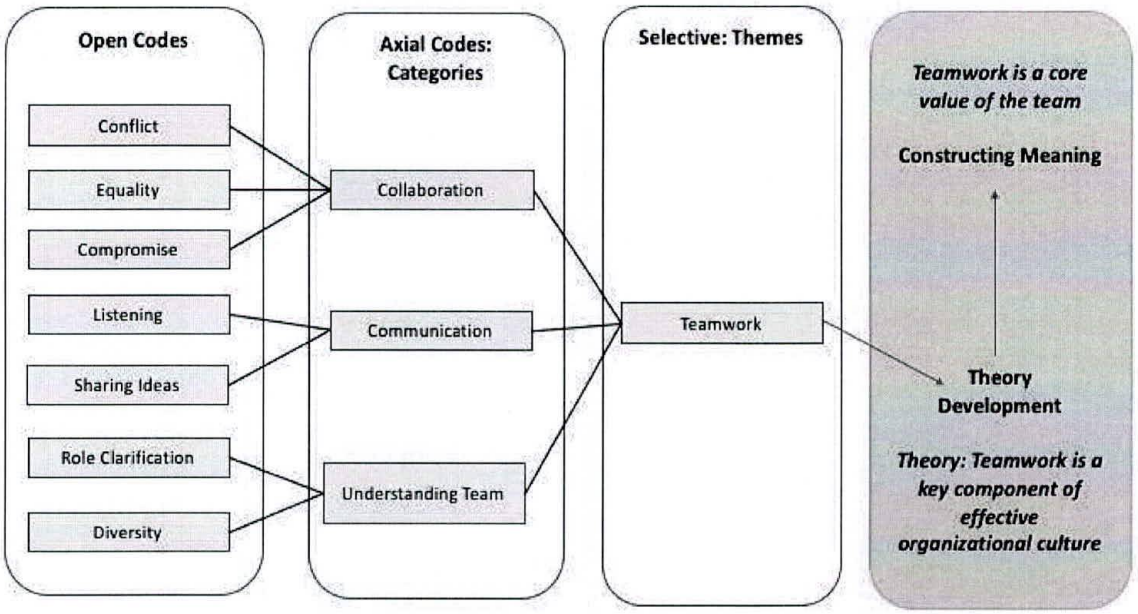

Figure 7. Creation of Theory and Meaning

Note. The coding process outcome can be theory development and the construction of meaning associated with the research purpose.

Coding in qualitative research enables researchers to identify, organize, and build theory. The roles of open, axial, and selective coding are critical to achieving the research goals of a study, as they provide opportunities for researchers to immerse themselves in the data. Coding promotes thematic integration and organizational strength, enabling researchers to be reflective and reflexive in joining the data in nuanced and intimate ways and employing the outcomes from the coding process to create meaning.

Conclusion

Coding in qualitative research enables researchers to identify, organize, and build theory. The roles of open, axial, and selective coding are critical to achieving the research goals of a study, as they provide opportunities for researchers to immerse themselves in the data. Each stage of the coding process progressively integrates the emergent themes acquired during data collection and continually refines the themes culminating in theory development and the creation of meaning.

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Doing a Thematic Analysis: A Practical, Step-by-Step Guide for Learning and Teaching Scholars.*

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Abstract

Data analysis is central to credible qualitative research. Indeed the qualitative researcher is often described as the research instrument insofar as his or her ability to understand, describe and interpret experiences and perceptions is key to uncovering meaning in particular circumstances and contexts. While much has been written about qualitative analysis from a theoretical perspective we noticed that often novice, and even more experienced researchers, grapple with the 'how' of qualitative analysis. Here we draw on Braun and Clarke's (2006) framework and apply it in a systematic manner to describe and explain the process of analysis within the context of learning and teaching research. We illustrate the process using a worked example based on (with permission) a short extract from a focus group interview, conducted with undergraduate students.

Key words: Thematic analysis, qualitative methods.

Acknowledgements.

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*URL: http://ojs.aishe.org/index.php/aishe-j/article/view/335

1. Background.

Qualitative methods are widely used in learning and teaching research and scholarship (Divan, Ludwig, Matthews, Motley & Tomlienovic-Berube, 2017). While the epistemologies and theoretical assumptions can be unfamiliar and sometimes challenging to those from, for example, science and engineering backgrounds (Rowland & Myatt, 2014), there is wide appreciation of the value of these methods (e.g. Rosenthal, 2016). There are many, often excellent, texts and resources on qualitative approaches, however these tend to focus on assumptions, design and data collection rather than the analysis process per se.

More and more it is recognised that clear guidance is needed on the practical aspects of how to do qualitative analysis (Clarke & Braun, 2013). As Nowell, Norris, White and Moules (2017) explain, the lack of focus on rigorous and relevant thematic analysis has implications in terms of the credibility of the research process. This article offers a practical guide to doing a thematic analysis using a worked example drawn from learning and teaching research. It is based on a resource we developed to meet the needs of our own students and we have used it successfully for a number of years. It was initially developed with local funding from[Irish] National Digital Learning Repository (NDLR) and then shared via the NDLR until this closed in 2014. In response to subsequent requests for access to it we decided to revise and develop this as an article focused more specifically on the learning and teaching context. Following Clarke & Braun's (2013) recommendations, we use relevant primary data, include a worked example and refer readers to examples of good practice.

2. Thematic Analysis.

Thematic analysis is the process of identifying patterns or themes within qualitative data. Braun & Clarke (2006) suggest that it is the first qualitative method that should be learned as '*..it provides core skills that will be useful for conducting many other kinds of analysis*' (p.78). A further advantage, particularly from the perspective of learning and teaching, is that it is a method rather than a methodology (Braun & Clarke 2006; Clarke & Braun, 2013). This means that, unlike many qualitative methodologies, it is not tied to a particular epistemological or theoretical perspective. This makes it a very flexible method, a considerable advantage given the diversity of work in learning and teaching.

There are many different ways to approach thematic analysis (e.g. Alhojailan, 2012; Boyatzis,1998; Javadi & Zarea, 2016). However, this variety means there is also some confusion about the nature of thematic analysis, including how it is distinct from a qualitative content analysis[1] (Vaismoradi, Turunen & Bonda, 2013). In this example, we follow Braun & Clarke's (2006) 6-step framework. This is arguably the most influential approach, in the social sciences at least, probably because it offers such a clear and usable framework for doing thematic analysis.

The goal of a thematic analysis is to identify themes, i.e. patterns in the data that are important or interesting, and use these themes to address the research or say something about an issue. This is much more than simply summarising the data; a good thematic analysis interprets and makes sense of it. A common pitfall is to use the main interview questions as the themes (Clarke & Braun, 2013). Typically, this reflects the fact that the data have been summarised and organised, rather than analysed.

Braun & Clarke (2006) distinguish between two levels of themes: semantic and latent. Semantic themes '*...within the explicit or surface meanings of the data and the analyst is not looking for anything beyond what a participant has said or what has been written.*' (p.84). The analysis in this worked example identifies themes at the semantic level and is representative of much learning and teaching work. We hope you can see that analysis moves beyond describing what is said to focus on interpreting and explaining it. In contrast, the latent level looks beyond what has been said and '*...starts to identify or examine the underlying ideas, assumptions, and conceptualisations – and ideologies - that are theorised as shaping or informing the semantic content of the data*' (p.84).

3. The Research Question And The Data.

The data used in this example is an extract from one of a series of 8 focus groups involving 40 undergraduate student volunteers. The full study involved 8 focus-groups lasting about 40 minutes. These were then transcribed verbatim. The research explored the ways in which students make sense of and use feedback. Discussions focused on what students thought about the feedback they had received over the course of their studies: how they understood it; the extent to which they engaged with it and if and how they used it. The study was ethically approved by the Dundalk Institute of Technology School of Health and Science Ethics Committee. All of those who participated in the focus group from which the extract is taken

1 See O'Cathain & Thomas (2004) for a useful guide to using content analysis on responses to open-ended survey questions.

also gave permission for the transcript extract to be used in this way.

The original research questions were realist ones – we were interested in students' own accounts of their experiences and points of view. This of course determined the interview questions and management as well the analysis. Braun & Clarke (2006) distinguish between a top-down or theoretical thematic analysis, that is driven by the specific research question(s) and/or the analyst's focus, and a bottom-up or inductive one that is more driven by the data itself. Our analysis was driven by the research question and was more top-down than bottom up. The worked example given is based on an extract (approx. 15 mins) from a single focus group interview. Obviously this is a very limited data corpus so the analysis shown here is necessarily quite basic and limited. Where appropriate we do make reference to our full analysis however our aim was to create a clear and straightforward example that can be used as an accessible guide to analysing qualitative data.

3.1 Getting started.

The extract: This is taken from a real focus-group (group-interview) that was conducted with students as part of a study that explored student perspectives on academic feedback. The extract covers about 15 minutes of the interview and is available in Appendix 1.

Research question: For the purposes of this exercise we will be working with a very broad, straightforward research question: What are students' perceptions of feedback?

3.2 Doing the analysis.

Braun & Clarke (2006) provide a six-phase guide which is a very useful framework for conducting this kind of analysis (see Table 1). We recommend that you read this paper in conjunction with our worked example. In our short example we move from one step to the next, however, the phases are not necessarily linear. You may move forward and back between them, perhaps many times, particularly if dealing with a lot of complex data.

Step 1: Become familiar with the data, Step 2: Generate initial codes, Step 3: Search for themes,	Step 4: Review themes, Step 5: Define themes, Step 6: Write-up.

Table 1: Braun & Clarke's six-phase framework for doing a thematic analysis

3.3 Step 1: Become familiar with the data.

The first step in any qualitative analysis is reading, and re-reading the transcripts. The interview extract that forms this example can be found in Appendix 1.

You should be very familiar with your entire body of data or data corpus (i.e. all the interviews and any other data you may be using) before you go any further. At this stage, it is useful to make notes and jot down early impressions. Below are some early, rough notes made on the extract:

The students do seem to think that feedback is important but don't always find it useful. There's a sense that the whole assessment process, including feedback, can be seen as threatening and is not always understood. The students are very clear that they want very specific feedback that tells them how to improve in a personalised way. They want to be able to discuss their work on a one-to-one basis with lecturers, as this is more personal and also private. The emotional impact of feedback is important.

3.4 Step 2: Generate initial codes.

In this phase we start to organise our data in a meaningful and systematic way. Coding reduces lots of data into small chunks of meaning. There are different ways to code and the method will be determined by your perspective and research questions.

We were concerned with addressing specific research questions and analysed the data with this in mind – so this was a *theoretical* thematic analysis rather than an *inductive* one. Given this, we coded each segment of data that was relevant to or captured something interesting about our research question. We did not code every piece of text. However, if we had been doing a more inductive analysis we might have used *line-by-line coding* to code every single line. We used *open coding*; that means we did not have pre-set codes, but developed and modified the codes as we worked through the coding process.

We had initial ideas about codes when we finished Step 1. For example, wanting to discuss feedback on a one-to one basis with tutors was an issue that kept coming up (in all the interviews, not just this extract) and was very relevant to our research question. We discussed these and developed some preliminary ideas about codes. Then each of us set about coding a transcript separately. We worked through each transcript coding every segment of text that seemed to be relevant to or specifically address our research question. When we finished we compared our codes, discussed them and modified them before moving on to the rest of the transcripts. As we worked through them we generated new codes and sometimes modified

existing ones. We did this by hand initially, working through hardcopies of the transcripts with pens and highlighters. Qualitative data analytic software (e.g. ATLAS, Nvivo etc.), if you have access to it, can be very useful, particularly with large data sets. Other tools can be effective also; for example, Bree & Gallagher (2016) explain how to use Microsoft Excel to code and help identify themes. While it is very useful to have two (or more) people working on the coding it is not essential. In Appendix 2 you will find the extract with our codes in the margins.

3.5 Step 3: Search for themes.

As defined earlier, a theme is a pattern that captures something significant or interesting about the data and/or research question. As Braun & Clarke (2006) explain, there are no hard and fast rules about what makes a theme. A theme is characterised by its significance. If you have a very small data set (e.g. one short focus-group) there may be considerable overlap between the coding stage and this stage of identifying preliminary themes.

In this case we examined the codes and some of them clearly fitted together into a theme. For example, we had several codes that related to perceptions of good practice and what students wanted from feedback. We collated these into an initial theme called The purpose of feedback.

At the end of this step the codes had been organised into broader themes that seemed to say something specific about this research question. Our themes were predominately descriptive, i.e. they described patterns in the data relevant to the research question. Table 2 shows all the preliminary themes that are identified in Extract 1, along with the codes that are associated with them. Most codes are associated with one theme although some, are associated with more than one (these are highlighted in Table 2). In this example, all of the codes fit into one or more themes but this is not always the case and you might use a 'miscellaneous' theme to manage these codes at this point.

Theme : The purpose of feedback.	**Theme: Lecturers.**	**Theme: Reasons for using feedback (or not).**
Codes	**Codes**	**Codes**
Help to learn what you're doing wrong,	Ask some Ls,	To improve grade,
Unable to judge whether question has been answered,	Some Ls more approachable,	Limited feedback,
Unable to judge whether question interpreted properly,	Some Ls give better advice,	Didn't understand fdbk,
Distinguish purpose and use,	Reluctance to admit difficulties to L,Fear of unspecified disadvantage,	Fdbk focused on grade ,
Improving grade,	Unlikely to approach L to discuss fdbk,	Use to improve grade,
Improving structure	Lecturer variability in framing fdbk,	Distinguish purpose and use,
	Unlikely to make a repeated attempt,	Unlikely to approach L to discuss fdbk,
	Have discussed with tutor,	Improving structure improves grade,
	Example: Wrong frame of mind	Can't separate grade and learning,
		New priorities take precedence = forget about feedback
Theme: How feedback is used (or not).	**Theme: Emotional response to feedback.**	**Theme: What students want from feedback.**
Codes	**Codes**	**Codes**
Read fdbk,	Like to get fdbk,	Usable fdbk explains grade and how to improve,
Usually read fdbk,	Don't want to get fdbk if haven't done well,	Want fdbk to explain grade,
Refer to fdbk if doing same subject,	Reluctance to hear criticism,	Example- uninformative fdbk,
Not sure fdbk is used,	Reluctance to hear criticism (even if constructive),	Very specific guidance wanted,
Used fdbk to improve referencing,	Fear of possible criticism,	More fdbk wanted,
Example: using fdbk to improve referencing,	Experience: unrealistic fear of criticism,	Want dialogue with L,
Refer back to example that 'went right',	Fdbk taken personally initially,	Dialogue means more,
Forget about fdbk until next assignment,	Fdbk has an emotional impact,	Dialogue more personalised/ individual,
Fdbk applicable to similar assignments,	Difficult for L to predict impact,	Dialogue more time consuming but better,
Fdbk on referencing widely applicable,	Student variability in response to fdbk,	Want dedicated class for grades and fdbk,
Experience: fdbk focused on referencing,	Want fdbk in L's office as emotional response difficult to manage in public,	Compulsory fdbk class,
Generic fdbk widely applicable.	Wording doesn't make much difference,	Structured option to get fdbk,
	Lecturer variability in framing fdbk,	Fdbk should be constructive,
	Negative fdbk can be constructive,	Fdbk should be about the work and not the person,
	Negative fdbk can be framed in a supportive way.	Experience – fdbk is about the work,
		Difficulties judging own work,
		Want fdbk to explain what went right,
		Fdbk should focus on understanding,
		Improving understanding improves grade.
		Want fdbk in Ls office as emotional response difficult to manage in public.

Table 2: Preliminary themes (* fdbk = feedback; L = lecturers)

3.6 Step 4: Review themes.

During this phase we review, modify and develop the preliminary themes that we identified in Step 3. Do they make sense? At this point it is useful to gather together all the data that is relevant to each theme. You can easily do this using the 'cut and paste' function in any word processing package, by taking a scissors to your transcripts or using something like Microsoft Excel (see Bree & Gallagher, 2016). Again, access to qualitative data analysis software can make this process much quicker and easier, but it is not essential. Appendix 3 shows how the data associated with each theme was identified in our worked example. The data associated with each theme is colour-coded.

We read the data associated with each theme and considered whether the data really did support it. The next step is to think about whether the themes work in the context of the entire data set. In this example, the data set is one extract but usually you will have more than this and will have to consider how the themes work both within a single interview and across all the interviews.

Themes should be coherent and they should be distinct from each other. Things to think about include:

- Do the themes make sense?
- Does the data support the themes?
- Am I trying to fit too much into a theme?
- If themes overlap, are they really separate themes?
- Are there themes within themes (subthemes)?
- Are there other themes within the data?

For example, we felt that the preliminary theme, *Purpose of Feedback* ,did not really work as a theme in this example. There is not much data to support it and it overlaps with *Reasons for using feedback(or not)* considerably. Some of the codes included here ('Unable to judge whether question has been answered/interpreted properly') seem to relate to a separate issue of student understanding of academic expectations and assessment criteria.

We felt that the *Lecturers* theme did not really work. This related to perceptions of lecturers and interactions with them and we felt that it captured an aspect of the academic environment. We created a new theme *Academic Environment* that had two subthemes: *Understanding*

Academic Expectations and *Perceptions of Lecturers*. To us, this seemed to better capture what our participants were saying in this extract. See if you agree.

The themes, *Reasons for using feedback (or not),* and H*ow is feedback used (or not)* ,did not seem to be distinct enough (on the basis of the limited data here) to be considered two separate themes. Rather we felt they reflected different aspects of using feedback. We combined these into a new theme *Use of feedback*, with two subthemes, *Why?* and *How?* Again, see what you think.

When we reviewed the theme *Emotional Response to Feedback* we felt that there was at least 1 distinct sub-theme within this. Many of the codes related to perceptions of feedback as a potential threat, particularly to self-esteem and we felt that this did capture something important about the data. It is interesting that while the students' own experiences were quite positive the perception of feedback as potentially threatening remained.

So, to summarise, we made a number of changes at this stage:

- We eliminated the Purpose of Feedback theme,
- We created a new theme *Academic Environment* that had two subthemes: *Understanding Academic Expectations* and *Perceptions of Lecturers,*
- We collapsed *Purpose of Feedback, Why feedback is (not)used* and *How feedback is (not) used* into a new theme, *Use of feedback,*
- We identified *Feedback as potentially threatening* as a subtheme within the broader theme *Emotional Response to feedback.*

These changes are shown in Table 3 below. It is also important to look at the themes with respect to the entire data set. As we are just using a single extract for illustration we have not considered this here, but see Braun & Clarke (2006, p 91-92) for further detail. Depending on your research question, you might also be interested in the prevalence of themes, i.e. how often they occur. Braun & Clarke (2006) discuss different ways in which this can be addressed (p.82-82).

Theme: Academic Context. **Subtheme: Academic expectations.** Unable to judge whether question has been answered, Unable to judge whether question interpreted properly, Difficulties judging own work. **Subtheme: Perceptions of lecturers ,** Ask some Ls, Some Ls more approachable, Some Ls give better advice, Reluctance to admit difficulties to L, Fear of unspecified disadvantage, Unlikely to approach L to discuss fdbk, Unlikely to make a repeated attempt, Have discussed with tutor, Example: Wrong frame of mind, Lecturer variability in framing fdbk.	**Theme: Use of feedback.** **Subtheme: Reasons for using fdbk (or not).** Help to learn what you're doing wrong, Improving grade Improving structure, To improve grade, Limited feedback, Didn't understand fdbk, Fdbk focused on grade, Use to improve grade, Distinguish purpose and use, Improving structure improves grade, Can't separate grade and learning, New priorities take precedence = forget about feedback. **Subtheme: How fdbk is used (or not).** Read fdbk/Usually read fdbk, Refer to fdbk if doing same subject, Not sure fdbk is used, Used fdbk to improve referencing, Example: using fdbk to improve referencing, Refer back to example that 'went right', Forget about fdbk until next assignment, Fdbk applicable to similar assignments, Fdbk on referencing widely applicable, Experience: fdbk focused on referencing, Generic fdbk widely applicable.	**Theme: Emotional response to feedback.** Like to get fdbk, Difficult for L to predict impact, Student variability in response to fdbk, **Subtheme: Feedback potentially threatening.** Don't want to get fdbk if haven't done well, Reluctance to hear criticism, Reluctance to hear criticism (even if constructive), Fear of possible criticism, Experience: fear of potential criticism, Fdbk taken personally initially, Fdbk has an emotional impact, Want fdbk in L's office as emotional response difficult to manage in public, Wording doesn't make much difference, Negative fdbk can be constructive, Negative fdbk can be framed in a supportive way.	**Theme: What students want from feedback.** Usable fdbk explains grade and how to improve, Example- uninformative fdbk, Very specific guidance wanted, More fdbk wanted, Want dialogue with L, Dialogue means more, Dialogue more personalised/ individual, Dialogue more time consuming but better, Want dedicated class for grades and fdbk, Compulsory fdbk class, Structured option to get fdbk, Fdbk should be constructive , Fdbk should be about the work and not the person, Experience – fdbk is about the work, Want fdbk to explain grade, Want fdbk to explain what went right, Fdbk should focus on understanding, Improving understanding improves grade, Want fdbk in L's office as emotional response difficult to manage in public.

Table 3: Themes at end of Step 4

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3.7 Step 5: Define themes.

This is the final refinement of the themes and the aim is to '*..identify the 'essence' of what each theme is about.*'.(Braun & Clarke, 2006, p.92). What is the theme saying? If there are subthemes, how do they interact and relate to the main theme? How do the themes relate to each other? In this analysis, What students want from feedback is an overarching theme that is rooted in the other themes. Figure 1 is a final thematic map that illustrates the relationships between themes and we have included the narrative for *What students want from feedback* below.

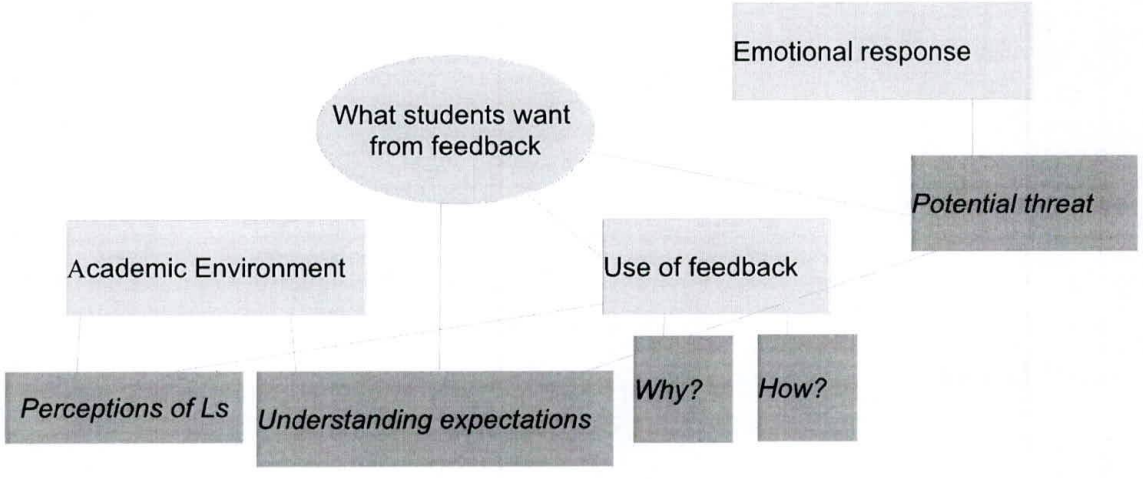

Figure 1: Thematic map.

What students want from feedback.

Students are clear and consistent about what constitutes effective feedback and made concrete suggestions about how current practices could be improved. What students want from feedback is rooted in the challenges; understanding assessment criteria, judging their own work, needing more specific guidance and perceiving feedback as potentially threatening. Students want feedback that both explains their grades and offers very specific guidance on how to improve their work. They conceptualised these as inextricably linked as they felt that improving understanding would have a positive impact on grades. Students identified that they not only had difficulties in judging their own work but also how or why the grade was awarded. They wanted feedback that would help them to evaluate their own work.

> '*Actually if you had to tell me how I got a 60 or 67, how I got that grade, because I know every time I'm due to get my result for an assignment, I kind of go 'oh I did so bad, I was expecting to get maybe 40 or 50', and then you go in and you get in the high 60s or 70s. It's like how did I get that? What am I doing right in this piece of work*?' (F1, lines 669-672).

Participants felt that they needed specific, concrete suggestions for improvement that they could use in future work. They acknowledged that they received useful feedback on referencing but that other feedback was not always specific enough to be usable.

> '*The referencing thing I've tried to, that's the only… that's really the only feedback we have gotten back ,I have tried to improve, but everything else it's just kind of been 'well done', I don't… hasn't really told us much.*' (F1, lines 389-392).

Significantly, it emerged that students want opportunities for both verbal and written feedback from lecturers. The main reason identified for wanting more formal verbal feedback is that it facilitates dialogue on issues that may be difficult to capture on paper. Moreover, it seems that feedback enables more specific comments on strengths and limitations of submitted work. However, it is also clear that verbal feedback is valued as the perception that lecturers are taking an interest in individual students is perceived to 'mean more'.

> '*I think also the thing that, you know… the fact that someone has sat down and taken the time to actually tell you this is probably, it gives you an incentive to do it (over-speaking). It does mean a bit more* ' (M1, lines 456-458).

For these participants, the ideal situation was to receive feedback on a one-to-one basis in the lecturer's office. Privacy is seen as important as students do find feedback potentially threatening and are concerned about managing their reactions in public. For these students, it was difficult to proactively access feedback, largely because the demands of new work limited their capacity to focus on completed work. Given this, they wanted feedback sessions to be formally scheduled.

3.8 Step 6: Writing-up.

Usually the end-point of research is some kind of report, often a journal article or dissertation. Table 4 includes a range of examples of articles, broadly in the area of learning and teaching, that we feel do a good job of reporting a thematic analysis.

Table 4: Some examples of articles reporting thematic analysis.

Gagnon, L.L. & Roberge, G. (2012). Dissecting the journey: Nursing student experiences with collaboration during the group work process. *Nurse Education Today*, 32(8), 945-950.

Karlsen, M-M. W., Wallander; Gabrielsen, A.K., Falch, A.L. & Stubberud, D.G. (2017). Intensive care nursing students' perceptions of simulation for learning confirming communication skills: A descriptive qualitative study. *Intensive & Critical Care Nursing,* 42, 97-104.

Lehtomäki, E., Moate, J. & Posti-Ahokas, H. (2016). Global connectedness in higher education: student voices on the value of crosscultural learning dialogue. *Studies in Higher Education, 4*1 (11), 2011-2027.

Polous, A. & Mahony, M-J. (2008). Effectiveness of feedback: the students' perspectives. *Assessment & Evaluation in Higher Education,* 33(2), 143-154.

4. Concluding Comments.

Analysing qualitative data can present challenges, not least for inexperienced researchers. In order to make explicit the 'how' of analysis, we applied Braun and Clarke (2006) thematic analysis framework to data drawn from learning and teaching research. We hope this has helped to illustrate the work involved in getting from transcript(s) to themes. We hope that you find their guidance as useful as we continue to do when conducting our own research.

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Clarke, V. & Braun, V. (2013) Teaching thematic analysis: Overcoming challenges and developing strategies for effective learning. *The Psychologist,* 26(2), 120-123.

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Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic Analysis: Striving to Meet the Trustworthiness Criteria. *International Journal of Qualitative Methods,* 16 (1), 1-13.

O'Cathain, A., & Thomas, K. J. (2004). "Any other comments?" Open questions on questionnaires – a bane or a bonus to research? *BMC Medical Research Methodology,* 4, 25.

Rosenthal, M. (2016). Qualitative research methods: Why, when, and how to conduct interviews and focus groups in pharmacy research. *Currents in Pharmacy Teaching and Learning*, 8(4), 509-516.

Rowland, S.L. & Myatt, P.M. (2014). Getting started in the scholarship of teaching and learning: a "how to" guide for science academics. *Biochemistry & Molecular Biology Education,* 42(1), 6-14.

Vaismoradi, M., Turunen, H. & Bondas, T. (2013). Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. *Nursing and Health Sciences*, 15(3), 398-405.

SimplyPsychology

Mixed Methods Research

simplypsychology.org/mixed-methods-research.html

Saul McLeod, PhD

June 25, 2024

What are mixed methods?

Mixed methods research integrates both quantitative and qualitative research methods within a single study or across multiple related studies.

- **Quantitative Methods**: Used to identify trends and relationships between variables, uses methods such as experiments, surveys, biological measures, and structured observations to gather numerical data.
- **Qualitative Methods**: Valuable for understanding participant experiences and perspectives, employs methods like interviews, focus groups, analysis of open-ended text, and observational field notes to gather non-numerical data.

Mixed methods research is particularly useful when a research question requires a multifaceted approach that can simultaneously explore trends in data and the nuances of individual experiences.

Integration, a key concept in mixed methods research, is the intentional combining of quantitative and qualitative research in such a way that they become interdependent and work together to achieve a common research goal.

For example, examining changes in school funding (*quantitative*) alongside teacher and student narratives (*qualitative*) about educational quality in a school district can provide a more comprehensive understanding of the relationship between funding and the actual experiences of those within the school system.

Several factors make mixed methods research distinct from conducting separate quantitative and qualitative studies. A few of these defining factors are:

- **Rigorous Methods:** It is not sufficient to merely include both quantitative and qualitative components within a study; both the quantitative and qualitative strands of the research should follow rigorous methods independently. One way to ensure this rigor is to match quantitative and qualitative data sources to guarantee parallel concepts are investigated.
- **Integration:** Integration, a key aspect of mixed methods research, involves intentionally combining quantitative and qualitative research to create interdependence and synergy between the two approaches. There are multiple potential levels of integration, including at the design, methods, and representation levels.
- **Rationale:** Researchers must clearly justify their reason for utilizing a mixed methods design, demonstrating that a mixed method approach is either necessary or will yield superior results in comparison to using a single methodology.

Examples

Here are some examples of how people use mixed methods research in real life:

> Mixed methods research is a powerful tool that can be used to answer complex research questions in a way that neither quantitative nor qualitative research can do alone:

1. ***Researchers could conduct a study to understand the impact of a new school-based mental health program on student well-being.*** Qualitative data could be collected through interviews with students and teachers to explore their experiences with the program and identify any barriers or facilitators to implementation. This data could then be used to explain variations in quantitative data on student mental health outcomes, such as changes in depression or anxiety symptoms.
2. ***A mixed methods study could be used to investigate the relationship between patient satisfaction and health outcomes following a specific medical procedure, such as surgery.*** Qualitative data from patient interviews or focus groups could provide insights into the reasons behind varying levels of satisfaction. Researchers could then connect these qualitative findings with quantitative data on post-surgical complications, recovery time, or readmission rates to see if there are correlations or patterns.

3. ***Researchers could use a mixed methods approach to examine the effectiveness of a teacher training program on student academic achievement in a particular subject, like mathematics.*** Quantitative data on student test scores before and after the training could be combined with qualitative data from teacher interviews and classroom observations. This integration of data could help determine if improvements in student performance are related to changes in teaching practices resulting from the training.

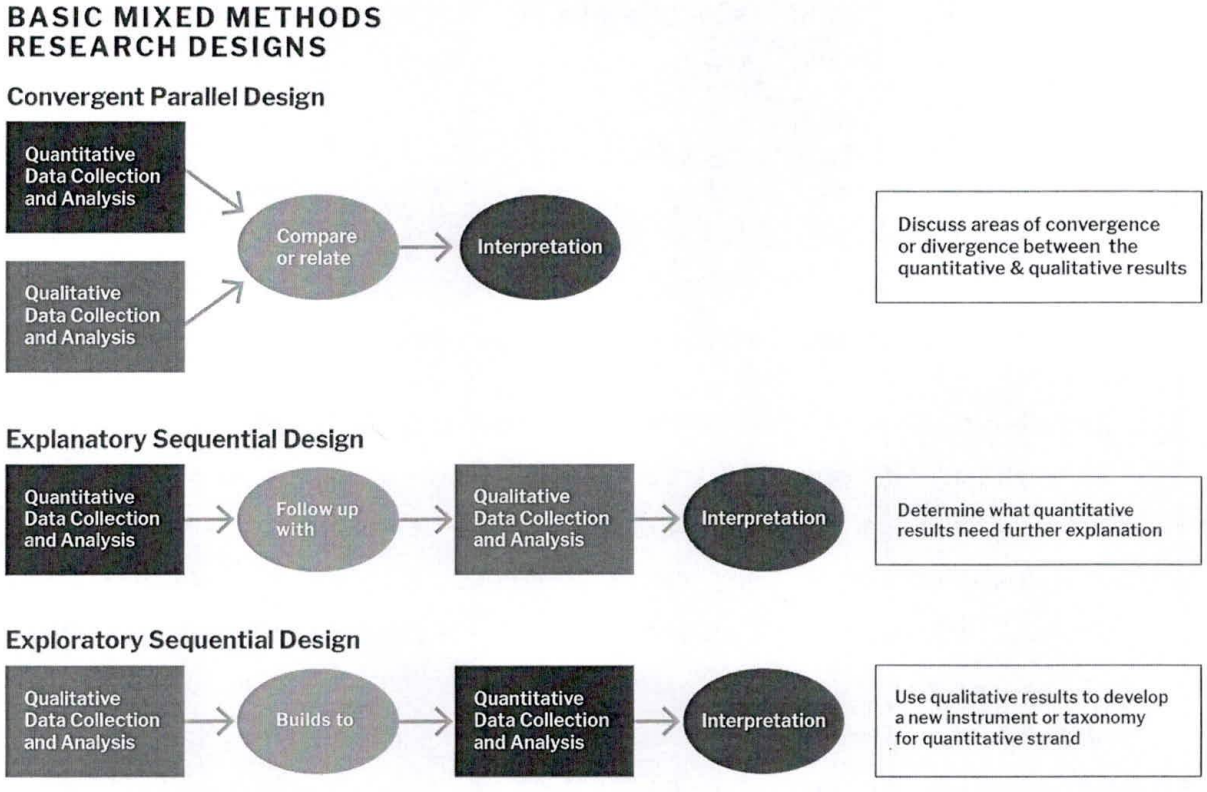
When to use mixed methods research

Researchers should clearly articulate their reasons for using a mixed methods research design. This rationale helps reviewers and other researchers understand why this design is the most appropriate for addressing the research questions.

1. **Triangulation**: *When researchers want to double-check their findings, they can use mixed methods.* This involves comparing results from quantitative and qualitative strands to confirm findings and enhance the validity of the study.
2. **Complementarity:** *When researchers need to explain confusing results, they can use mixed methods to get a clearer picture.* This aims to elaborate on or clarify the findings of one strand with the results of the other strand. This approach can be particularly useful when quantitative findings are statistically significant but lack practical meaning or when qualitative findings need further clarification.
3. **Development:** *When researchers need to design a good survey or test, they can use mixed methods.* This rationale involves using the results from one method to help develop or inform the other method. This can include using qualitative findings to develop and validate an instrument for the quantitative strand, or using quantitative findings to identify specific participants or groups for the qualitative strand.
4. **Initiation:** *This is when researchers want to explore differences in findings from different methods.* By comparing different perspectives, they can develop new interpretations of what they're studying. It leverages the strengths of each approach to clarify, contextualize, and enrich the overall findings, rather than focusing on resolving contradictions.
5. **Expansion:** *When researchers want to learn more about something, they can use mixed methods.* This rationale seeks to expand the breadth and range of a study by using mixed methods to investigate different components of a research question or to study different research questions within the same study.

Mixed methods research designs

> Mixed methods research designs provide researchers with a structured approach to combining qualitative and qualitative data. Creswell and Plano Clark (2018) identify three core mixed methods designs:



Convergent Parallel Design

Convergent parallel design involves simultaneously collecting quantitative and qualitative data, analyzing these datasets separately, and then merging the results for interpretation.

For example, this design could be used to understand domestic violence and abuse among gay and bisexual men by matching data from semi-structured interviews with survey data.

Here's how it works:

- The process includes collecting data for both strands concurrently but separate from each other, analyzing each independent strand, and merging them.
- The key feature is that both types of data are given equal priority and are collected within a short time interval or simultaneously.
- Researchers then compare and contrast the findings to develop a more comprehensive understanding of the research problem.

Explanatory Sequential Design

An explanatory sequential design is used in research when you want to use one type of data to help explain the findings of another type.

For example, this design can be used to learn more about why students stayed enrolled in online education programs. The researchers could first look at survey data and then followed up with interviews to get a deeper understanding of the factors involved.

Here's how it works:

- You start by collecting and analyzing quantitative data. This usually means collecting numbers, like from surveys, and analyzing them to see if there are any patterns or relationships.
- Then, you take those quantitative results – particularly the ones that are significant, surprising, or need further explanation – and use them to guide your qualitative data collection. Qualitative data usually involves words and stories, like what you would get from interviews.
- You analyze the qualitative data to see if they can help you understand the patterns you saw in the quantitative data. For example, you might have found a surprising trend in a survey, and now you can use interviews to better understand why that trend exists.
- Finally, you combine what you learned from both types of data to get a more complete understanding of what you're researching

Exploratory Sequential Design

An exploratory sequential design is a type of research that involves two phases of data collection and analysis, with the qualitative phase coming first.

The exploratory sequential design is most effective when researchers have a clear rationale for using a mixed methods approach and when the research questions lend themselves to both qualitative and quantitative exploration.

Here's how it works:

- **Phase 1: Qualitative Exploration:** Researchers begin by collecting and analyzing qualitative data. This typically involves gathering in-depth information from a smaller group of participants through methods like interviews, focus groups, or observations. The goal of this phase is to gain a rich understanding of the experiences, perspectives, and meanings associated with the research topic.

- **Phase 2: Quantitative Expansion:** The findings from the qualitative phase are then used to inform the design of the quantitative phase. This might involve developing a survey instrument based on the themes that emerged from the qualitative data, identifying specific variables to measure, or creating an intervention to test.
- **Integration:** In the final step, researchers integrate the findings from both phases to develop a more comprehensive understanding of the research topic. This might involve comparing the quantitative results to the qualitative findings, using the qualitative data to explain unexpected quantitative results, or developing a theory based on the combined insights from both phases.

An example:

Researchers were interested in understanding the factors that influence brain donation decisions among older minorities.

They started by conducting interviews with individuals from this population to explore their thoughts, beliefs, and experiences related to brain donation.

The themes and insights from these interviews were then used to develop a survey instrument to measure the factors identified as potentially influencing donation decisions.

Embedded (or nested) Design

Embedded or Nested Designs in Health Sciences

Embedded designs use quantitative and qualitative approaches together, with one embedded in the other, to yield greater insight. This might look like supplemental qualitative data embedded in a larger quantitative study design, such as an experimental trial. These types of designs may be a variation of convergent or sequential designs.

Embedded design is a method for linking qualitative and quantitative data collection and analysis at multiple points, particularly useful in intervention research.

Qualitative data may be used prior to the intervention to inform strategies to best recruit individuals or to develop the intervention, during the experiment to examine the process being experienced by participants, or after the experiment to follow up and better understand the quantitative outcomes.

Embedding involves combining connecting, building, or merging data.

- **Connecting** links data through sampling. For example, in a study with surveys and interviews, participants for the interviews might be chosen from those who completed the survey.
- **Building** uses one type of data to inform the other. An example of this is when researchers analyze baseline survey data and use those findings to design interview questions.
- **Merging** involves combining qualitative and quantitative data to directly compare results.

Here's how it works:

- **Pretrial:** Qualitative data, or a mix of qualitative and quantitative data, can help clarify outcome measures, understand factors that might lead to bias, or develop tools for use during the trial.
- **During the Trial:** Qualitative data helps understand contextual factors that might influence results, providing detailed information about the subjects' experiences.
- **Post-Trial:** Researchers use qualitative data to explain outliers, debrief subjects or researchers, or create hypotheses for implementation.

Integration

> Integration is the intentional combination of quantitative and qualitative research, resulting in a synergistic and interdependent relationship between the two approaches. It is a multifaceted concept that manifests across various stages of the research process, from design to reporting.

Integration Trilogy: Design, Methods, and Interpretation & Reporting

Integration in mixed methods research operates at three distinct but interconnected levels, often referred to as the integration trilogy:

1. **Integration at the Design Level:** This involves selecting a mixed methods design that outlines the sequence, priority, and purpose of integrating the quantitative and qualitative strands. Common designs include exploratory sequential, explanatory sequential, and convergent designs.

2. **Integration at the Methods Level:** Integration strategies are the methods employed to combine quantitative and qualitative research elements. These strategies are not mutually exclusive and can be used in various combinations to achieve a holistic understanding of the research problem.
    - **Merging**: This involves analyzing data from both strands and assessing whether the findings converge, diverge, or expand upon one another. This can involve comparing themes with statistical data, exploring the quantitative profile of qualitative themes, or transforming qualitative data into quantitative data for statistical analysis. Joint displays, such as tables or matrices, can visually represent merged data.
    - **Connecting**: This involves using one type of data to inform the sampling frame of the other. For instance, quantitative data can be used to identify a subset of participants for qualitative interviews. This strategy is particularly useful in sequential designs, where one strand precedes the other.
    - **Building**: This approach uses one database (qualitative or quantitative) to inform the data collection approach of the other. This could involve developing a quantitative instrument based on themes identified through qualitative research or refining a qualitative interview guide based on quantitative findings.
3. **Integration at the Interpretation and Reporting Level:** This involves combining and presenting the findings in a way that highlights the synergistic insights gained from integrating the two strands. This can be achieved through narrative techniques like weaving and contiguous approaches or through data transformation and joint displays.
    - **Integrating through narrative** involves using a single report, or a series of reports, to describe the quantitative and qualitative results. The Survival After Acute Myocardial Infarction (SAMI) study provides an example of a narrative integration.
    - **Integrating through data transformation** involves converting one type of data (qualitative or quantitative) into the other type. For example, qualitative data may be converted into numerical counts, which are then integrated with other numerical data for analysis.
    - **Integrating through joint displays** involves using visual elements, such as tables, matrices, or figures, to present the integrated data. An example of a study using joint displays is a mixed-methods evaluation that explored ethical aspects of adaptive clinical trial designs.

Narrative Integration

Integrating through narrative in mixed methods research involves describing qualitative and quantitative findings within a single report or a series of reports. The manner in which these findings are presented can take on three distinct approaches: weaving, contiguous, or staged.

- **Weaving** presents qualitative and quantitative findings together, interlacing them theme-by-theme or concept-by-concept. For example, Classen et al. intertwined results from a national crash dataset and stakeholder perspectives to understand the causative factors of vehicle crashes among the elderly and to formulate guidelines for public health interventions.
- **Contiguous integration** entails presenting findings within a single report, but the qualitative and quantitative findings are segmented into distinct sections. For instance, presenting survey findings in the initial part of the results section and qualitative findings about contextual factors in a subsequent part of the report.
- The **staged approach** is frequently employed in multistage mixed methods studies, where the results from each stage are reported sequentially as the data are analyzed and published separately.

Data Transformation

Mixed methods analysis encompasses the entire process of analyzing and interpreting both quantitative and qualitative data within a single study or a program of research.

This involves selecting appropriate analytic techniques for each strand and implementing integration strategies to merge, connect, or build upon the findings.

Mixed methods data transformation involves converting data from one form to another. This can involve:

- **Quantitizing**: Transforming qualitative data, such as interview transcripts, into numerical codes or categories for statistical analysis.
- **Qualitizing**: Converting quantitative data, such as survey responses, into narrative descriptions or themes for qualitative analysis.

Data transformation facilitates merging data and conducting analyses that cut across the quantitative-qualitative divide.

By adhering to these principles and employing these strategies, researchers can leverage the strengths of mixed methods research to address complex research questions and generate rich, insightful, and impactful findings.

Joint Displays: Visual Aid for Integration

Joint displays are visual representations, such as tables, matrices, figures, or graphs, that bring together quantitative and qualitative data to facilitate interpretation and draw new insights beyond what each strand could achieve independently.

They are particularly helpful in merging data, comparing results, and representing meta-inferences, the novel insights that emerge from integrating the two strands.

Types of Joint Displays:

- **Side-by-side joint displays** present quantitative and qualitative findings alongside each other for direct comparison. For instance, researchers studying patient experiences might present quantitative satisfaction scores next to qualitative themes from interviews to illuminate both the numerical trends and the nuanced reasons behind them
- **Integrated matrix displays** arrange data in rows and columns to facilitate the comparison of themes, patterns, and relationships between the two strands. Using color-matching to connect corresponding data points in the display can make it easier to compare the quantitative and qualitative findings
- **Visual joint displays** use graphs, charts, or other visual elements to enhance the presentation and understanding of integrated findings.

Assessment of Fit and Integrated Interpretation

Assessment of fit of integration involves evaluating the coherence and consistency between the quantitative and qualitative findings. This assessment can reveal three potential outcomes:

- **Convergence**: Findings from both strands align and support each other, strengthening the validity and credibility of the results.
- **Divergence**: Findings from the two strands differ, prompting further exploration to understand the reasons behind the discrepancies and potentially revealing new perspectives on the phenomenon under study.
- **Expansion**: Findings from one strand complement and elaborate on the other, providing a broader and more nuanced understanding of the research problem.

Integrated interpretation involves synthesizing the quantitative and qualitative findings to develop a holistic understanding of the research problem, acknowledging both points of convergence and divergence.

This process requires integrated thinking, a mindset that values both approaches equally and seeks a synergistic understanding that transcends the limitations of either method in isolation.

Steps for conducting mixed methods research

Remember that mixed methods research is an iterative process. Researchers should remain flexible and adaptable throughout the study, adjusting plans as needed based on emerging findings or unexpected challenges.

The dynamic interplay between quantitative and qualitative approaches is a hallmark of mixed methods research, and embracing this fluidity contributes to the richness and depth of the findings.

Step1: Formulating the Research Problem

- **Identify the Overall Aim:** Begin by clearly defining the overarching, long-term goal of the study.
- **Develop Research Objectives:** Establish specific objectives that will contribute to achieving the overall aim.
- **Determine the Research/Mixing Rationale:** Articulate a clear rationale for conducting the study, justifying why it is needed. Additionally, explain why mixing quantitative and qualitative approaches is the most appropriate methodology for addressing the research problem. This involves outlining the specific reasons for combining the two approaches, such as triangulation, complementarity, or development.
- **Establish the Research/Mixing Purpose:** Define the purpose of the study, specifying what will be undertaken. Similar to the rationale, elaborate on the purpose of mixing quantitative and qualitative approaches, explaining how the integration will provide a more comprehensive understanding of the research problem.
- **Formulate Research Questions:** Develop clear and concise research questions that will guide the study. In mixed methods research, it is essential to include integrated mixed methods research questions that reflect the combined quantitative and qualitative strands.

Step 2: Designing the Study

- **Select a Mixed Methods Design:** Determine the most suitable mixed methods design based on the research questions, rationale, and purpose. Consider whether a convergent, sequential, transformative, or multiphase design aligns best with the study's objectives.
- **Develop a Sampling Design:** Define the target population and create a sampling scheme for both the quantitative and qualitative strands. Specify the sample size for each strand and address any sampling considerations specific to the chosen mixed methods design, such as the use of the same sample, a subsample, multiple samples, or multilevel samples.
- **Plan for Data Analysis:** Determine the data analysis techniques that will be used for both quantitative and qualitative data. Consider how the data from each strand will be integrated and analyzed to answer the mixed methods research questions.

Step3: Implementing the Study

- **Collect the Data:** Gather data using the selected methods, ensuring rigor and adherence to ethical considerations for both quantitative and qualitative data collection.
- **Analyze the Data:** Analyze the quantitative and qualitative data using the chosen techniques.

Step 4: Integrating and Interpreting Findings

- **Validate the Data:** Assess the validity and trustworthiness of both the quantitative and qualitative data, employing appropriate methods for each strand.
- **Interpret the Data:** Interpret the findings from both strands, considering the integrated mixed methods perspective.
- **Draw Inferences:** Integrate the quantitative and qualitative findings to generate meta-inferences that provide a comprehensive understanding of the research problem. Clearly articulate the insights gained from mixing methods and how the integrated findings contribute to the study's overall conclusions.
- **Meta-Inferences:** These are the overarching conclusions drawn by synthesizing findings from the qualitative and quantitative strands.
- **Disseminate Findings:** Communicate the findings in a clear and concise manner, emphasizing the value added by using a mixed methods approach.

Key Considerations for Integration

- **Planning for Integration:** Thoughtfully plan for integration throughout the research process, from identifying data sources to selecting integration strategies and planning data analysis.
- **Matching Data Sources:** In convergent designs, strive to match data sources to ensure that the quantitative and qualitative data capture parallel concepts. This facilitates a more robust integration and comparison of findings.
- **Selecting Integration Strategies:** Choose appropriate integration strategies, such as merging, connecting, or building, based on the research questions and design. Merging involves combining data to identify convergence, divergence, or relationships. Connecting uses findings from one strand to inform the other. Building develops new insights or hypotheses based on the combined data.
- **Representing Integration:** Clearly represent and write about the integration process and findings, using tables, figures, or detailed descriptions to illustrate how the quantitative and qualitative strands were combined to generate a more nuanced understanding of the research problem.

Mixed Methods Quality and Publication

The quality of a mixed methods study hinges on several factors:

- **Methodological quality**: This refers to the rigor and appropriateness of the methods used in both the quantitative and qualitative strands.
- **Reporting quality**: This pertains to the clarity, transparency, and completeness of the research report in describing the research process, including the integration procedures and the rationale for mixing methods.
- **Quality of integration**: This refers to the effectiveness of the integration process in generating meaningful and insightful findings that go beyond what either method could achieve alone.

Mixed methods publications often employ a weaving approach, integrating findings throughout the manuscript, or a contiguous approach, presenting quantitative and qualitative results in separate sections but linking them through cross-referencing and discussion.

A staged approach involves publishing multiple papers, each focusing on a specific aspect of the mixed methods study.

Benefits of mixed methods research

1. **Enhanced Understanding:** Mixed methods research provides a more complete comprehension of research problems by combining quantitative and qualitative approaches. This approach is especially valuable in positive psychology, where constructs often have reciprocal relationships, and in understanding complex processes and systems in health and healthcare. For instance, in studying adolescent bullying, a mixed methods approach allows researchers to explore risk factors, PTSD symptoms, and individual experiences.
2. **Increased Validity:** Using multiple methods can strengthen the validity of findings by allowing triangulation, where qualitative and quantitative data are compared to corroborate results. For example, a study on domestic violence among gay and bisexual men used a convergent design, matching semistructured interviews with survey data to enhance the validity of their findings.
3. **Complementarity:** Mixed methods research allows researchers to examine different facets of a research question using the strengths of each approach. Quantitative methods can identify trends and relationships, while qualitative methods provide nuanced insights. This approach is beneficial when a single method cannot fully capture the complexity of a phenomenon, such as language learning motivation.
4. **Development and Refinement:** Researchers can leverage mixed methods research to develop and refine research instruments and interventions. For instance, qualitative data can inform the creation of quantitative surveys, ensuring they are culturally relevant and address specific research questions.
5. **Explanation of Findings:** Qualitative data can be particularly useful in explaining and contextualizing quantitative results. This allows researchers to move beyond statistical associations and gain a deeper understanding of the underlying mechanisms and individual experiences.
6. **Methodological Innovation:** Mixed methods research encourages methodological innovation by blending different research traditions. It promotes flexibility and allows researchers to adapt their approaches to best suit their research questions. This is especially valuable for exploring novel research areas or addressing complex social issues.

Disadvantages of mixed methods research

1. **Labor Intensity:** Mixed methods research demands significant time, resources, and effort compared to single-method studies. The integration of qualitative and quantitative approaches necessitates expertise in designing and implementing both phases, potentially posing challenges for researchers with a predominant quantitative or qualitative orientation.
2. **Expertise Requirements:** Conducting rigorous mixed methods research requires researchers to have expertise in both quantitative and qualitative methodologies. This can be challenging, as researchers often specialize in one approach. The lack of expertise in either strand can compromise the rigor of the study and lead to methodological concerns, particularly in the qualitative strand.
3. **Potential for Bias:** The inherent differences between quantitative and qualitative data can make integration challenging. Ensuring that data transformations are defensible and addressing potential biases between methods is crucial for drawing valid inferences.
4. **Integration Challenges:** Achieving meaningful integration of quantitative and qualitative data can be difficult. The lack of clear guidelines and the potential for irreconcilable data sources can hinder the synergistic potential of mixed methods research, sometimes leading to separate publications of quantitative and qualitative results instead of a unified, integrated analysis.
5. **Limited Consensus on Terminology and Quality Assessment:** The field of mixed methods research lacks a universally agreed-upon terminology, leading to ambiguity and challenges in comparing and evaluating studies. The absence of standardized quality assessment criteria further complicates the evaluation of rigor and trustworthiness in mixed methods research.
6. **Power Imbalances in Data Integration:** Integrating data from samples with different power dynamics, such as those at different levels of a bureaucracy, can raise concerns about the validity of triangulation and the interpretation of findings. The potential for power imbalances to influence the identification of differences or paradoxes necessitates careful consideration during data integration.

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Examples

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Journals

- The *Journal of Mixed Methods Research* (*JMMR*)
- *Quality and Quantity*
- The Annals of Mixed Methods Research

SOCHARA Institutional Scientific and Ethics Committee for Review of Research Proposals (SISEC)

A presentation and discussion for participants of the MPH-CH 2025-26

Ms. Janelle Fernandes, Member Secretary, SISEC

Ethical Guidelines

- ICMR: "Handbook on National Ethical Guidelines For Biomedical and Health Research Involving Human Participants - 2018"

Table 1: General Principles

1. Principle of Essentiality
2. Principle of Voluntariness
3. Principle of Non-exploitation
4. Principle of Social Responsibility
5. Principle of Ensuring Privacy & Confidentiality
6. Principle of Risk Minimization
7. Principle of Professional Competence
8. Principle of Maximization of Benefit
9. Principle of Institutional Arrangements
10. Principle of Transparency & Accountability
11. Principle of Totality of Responsibility
12. Principle of Environmental Protection

Table 4: Ethical issues related to reviewing a protocol

- Social values
- Benefit–risk assessment
- Payment for participation
- Community considerations
- Disclosure of conflict of interest
- Scientific design and conduct of study
- Selection and recruitment of participants
- Protection of privacy and confidentiality
- Review of informed consent process
- Qualification of researchers and adequacy of study sites
- Plans for medical management and compensation for study related injury

Important Questions

- What are the benefits of this study?
- Who are the research participants?
- What are the risks?
- How will you minimise the risks?
- Who needs to provide informed consent? How will confidentiality be maintained?
- What are your main ethical concerns? (are the participants appropriate for the study? How will the researcher's role affect the study? Is the research design valid?
- Is the researcher capable of conducting the study? Is additional training required?

As the Researcher

- Honesty about who you are; what your research is about and why you wish to speak to potential participants, what will you do with the information
- Seek mutually agreeable solutions from IRB to protect the participants

Ethical Considerations

Quantitative and Qualitative Research

- tends to be longer and involves more prolonged engagement with respondents/participants, more familiarity
- iterative nature and informal communication
- confidentiality: small number of participants which can compromise anonymity. Use unique identifiers. Environment selected for interviews.
- Treat participants as capable of own decision making and dont lead participant answers or coerce. But also potect those who may not be capable of making their own decisions.
- Ethical reporting - ensuring accuracy, avoiding plagiarism, protecting partiicpant identities also including culture

Ethical Considerations

Informed Consent

- provide participants with essential information and clear communication that explains the voluntary nature of participation and the ability to withdraw at any time
- must be specific to the purpose.
- participations should be aware about essential information about the research - who funded, who will conduct, how the data is stored, used, and what is required of participants and how will this research benefit them.
- If verbal consent is taken, there must be a witness. Keep in mind confidentiality which all the research team must be read into.
- Group consent and consent from guardians for participation of minors

Ethical Considerations

Protection from Harm

- mitigating or protecting from physical or psychological harm.
- consider if your topic is a sensitive research topic e.g. Sexual abuse - will you provide access to support, how will you sensitively design your questionnaire guide and provide a contact for support if required·
- In-depth interviews and other data collection: avoid collecting unnecessary data, private information·
- Use clear and direct questions. · If topic gets too emotional, move towards less sensitive topics. · Do not provide counsel or advice.
- Confidentiality statement - who should sign it?

SISEC Review

- Will take place online
- Requires a quorum of 5 members for a decision
- SISEC members:
  - Chairperson, Researcher and Ethicist
  - Member Secretary, NGO and Allied Health Science
  - Medical Doctor
  - Denstist, Academician and Researcher
  - Theologian
  - Lawyer and Academician
  - Statistician
  - NGO and Other Gender

Process for Application

- Fill out the SISEC Proforma and email it along with a covering email letter and attachments of supporting documents (as specified in the Proforma) to the SISEC Member Secretary (email: sisec@sochara.org)
- The documents will be checked and any missing documents will be requested for
- The SISEC application must be received by the SISEC for review at least three weeks prior to the presentation and review meeting
- The applicant will be informed of the date of the scheduled review meeting
- The meeting will take place online via Zoom during which the applicant will be required to make a presentation of the research proposal and provide any clarifications sought by the SISEC.
- Feedback from the SISEC will be emailed to the applicant in writing and a revised proposal will need to be submitted within a week of receiving the feedback
- The final decision on approval will be communicated in a written and signed letter by the Chairperson through the Mmeber Secretariat. Data collection can only begin after receiving the signed letter of SISEC approval.

Thank You