



Society for Community Health Awareness Research and Action

## **Community Health Learning Programme (CHLP) 2015 – 16**

**Dala Akor Khar Phanbuh**

**A  
REPORT  
ON  
COMMUNITY HEALTH LEARNING**

***'Bricks of learning, wall of change'***



## Content

Title	Page No
<b>Acknowledgement -----</b>	<b>4 -5</b>
<b>Introduction -----</b>	<b>6</b>
<b>A Journey to SOCHARA -----</b>	<b>7</b>
<b>Bricks of learning, wall of change -----</b>	<b>8</b>
<b>My learning goals -----</b>	<b>9</b>
<b>Chapter-1 Learning from Collectives-----</b>	<b>10 - 18</b>
<i>i. Insight learning</i>	
<i>ii. Balloonist view</i>	
<i>iii. Understanding on health</i>	
<i>iv. Tap turner off</i>	
<i>v. Paradigm shift</i>	
<i>vi. Health for all</i>	
<i>vii. Communitisation and Community Action for Health</i>	
<i>viii. Down-up and up-down approach:</i>	
<i>ix. Social determinants of health</i>	
<i>x. Intersectoral collaboration:</i>	
<i>xi. Axioms</i>	
<i>xii. Social vaccine:</i>	
<i>xiii. Understanding community</i>	
<i>xiv. Equity versus equality</i>	

- xv. *Appropriate technology*
- xvi. *Globalization*
- xvii. *Research*

**Chapter- 2: Presentations-----20**

- i. *Journal club*
- ii. *Field work presentation*

**Chapter-3: Games-----20**

- (a) *Power walk*
- (b) *Monsoon game*

**Chapter-4 Inner Learning----- 21-22**

- i. *Johari window*
- ii. *Communication*

**Chapter-5: Organisations visited -----23 -35**

- i. *CHESS*
- ii. *Foundation for Revitalisation of Local Health Traditions (FRLHT)*
- iii. *CHC, Kolar, Bhopal*
- iv. *An orientation at Ekta-Parishad*
- v. *Madhya Pradesh Vigyan Committee*
- vi. *Protest conducted by Ekta Parishad:*
- vii. *District hospital, Bhopal*
- viii. *Sambhavna Trust*
- ix. *Tamia, Madhya Pradesh*

**Chapter-6 : Learning by doing ----- 36- 40**

**Chapter- 7: Case studies -----41- 46**

**Chapter-8: Overall learning experiences ----- 47- 52**

**Chapter- 9: Filed Study -----53- 85**

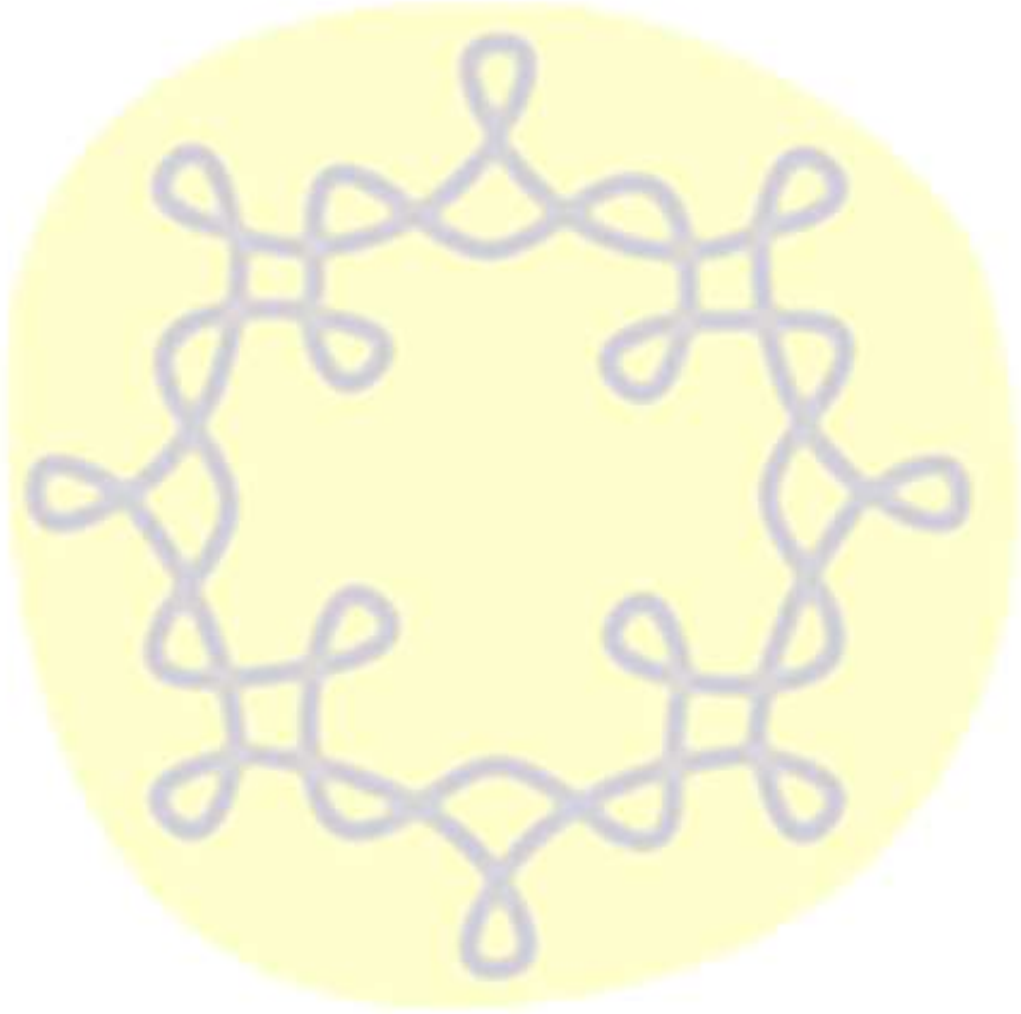
**Annexures -----86-97**

**Annexure A: Survey Guide**

**Annexure B: Consent form:**

**Annexure C: Withdrawal of consent:**

**Annexure D: Participants Information Sheet**



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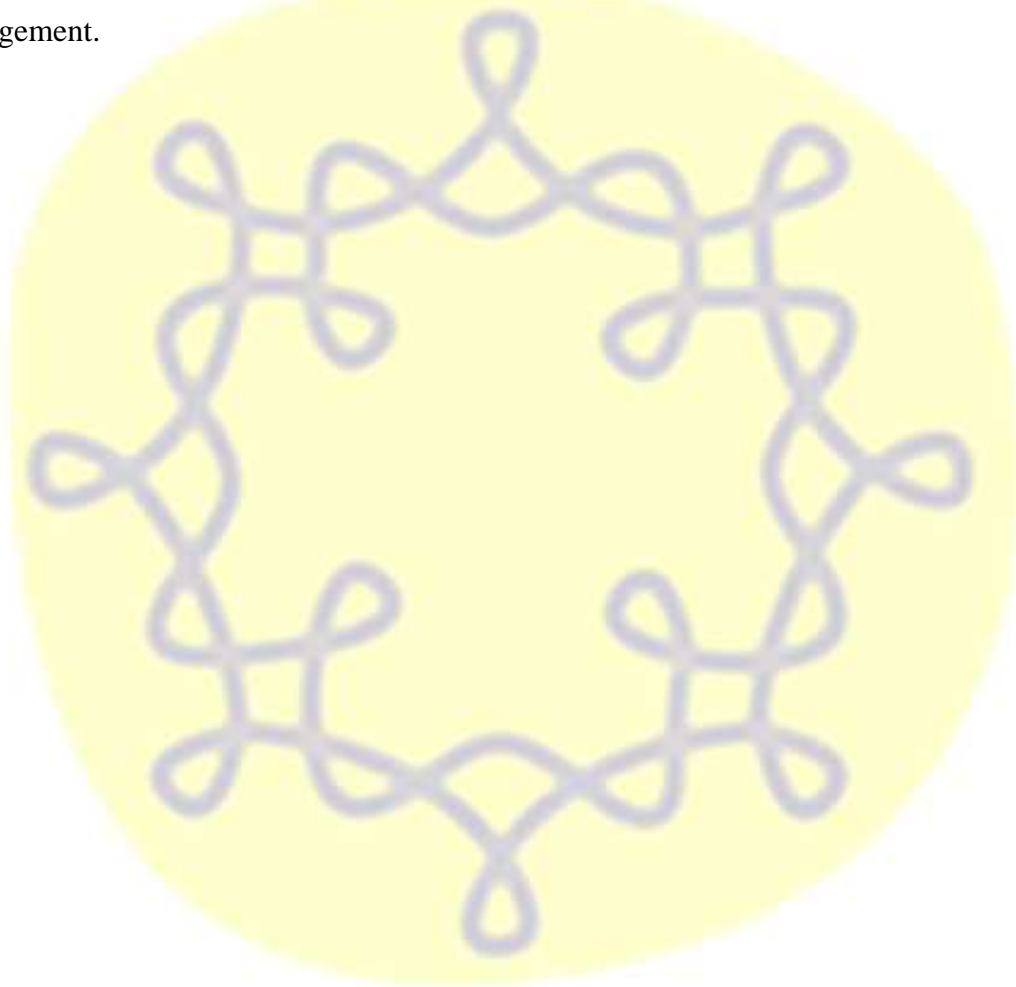
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Finally I would like to thank my family; my parents for their constant love, support and encouragement.





## Introduction

### *A journey begins....*

I came from Shillong, which is the capital city of Meghalaya. Shillong is also known as the “Scotland of the East”. Shillong is situated at the average altitude of 4,908 feet (1,491m) above sea level. Meghalaya in Sanskrit means ‘*abode of clouds*’. The wettest places in the world are also located here. The area of the State is 22429 sq. km with 11 districts with the population of 29,66,889 according to 2011 census.

I was born and brought up in Shillong. Presently my parents are retired from the government sector, both my siblings are married and working in the government sector. My parents were graduates, and being raised in such a family has given me encouragement to follow my aspirations.

The year that had changed me completely was 2008, which gave my life a U-turn and thereby had helped me to rediscover myself to walk in the path of humanity; I could say that I am here because of the change. After 2008, I started to have a desire to do something for society and to help people. I had an opportunity to join MSW (Master of Social Work) which opened the door for me to be in the social work field.

After my MSW, I had an opportunity to teach social work in Shillong for 1 year. The whole year I had wonderful learning and exposures that had given me certain boldness and confidence. But I still had desires to do something more in life, as I wasn’t satisfied with what I was doing. With my parents’ support and trust they had in me, this opened another door to join SOCHARA, though far from home more than 2000 km. I had my MSW friends who joined SOCHARA; through them I came to know about CHLP (Community Health Learning Program) which encouraged me to join SOCHARA.

## *A journey to SOCHARA...*

Journey in SOCHARA is like sitting on a boat along with my other co- fellows rowing together against the current of the water; the current is the knowledge I learnt throughout my educational journeys. Being with the other co-fellows rowing together every day and dependent on one another's strength, this had greatly impacted my insight learning.

Rowing together with the guidance of SOCHARA has helped me to understand the strong winds, strong waves and the challenges in the outside boat. Rowing together had helped me in building and developing my intra personal skills and confidence to row the boat forward.

Inside the boat, there is a community established that share common interest and a diverse culture and background, building a bond of friendship and overall sharing and building a community among ourselves.

I never thought that my life would be changed through SOCHARA. Experiencing SOCHARA is one of the best that happened to me, SOCHARA to me is like a gardener that plant seed, taking care by giving fertilizers and manure and by watering everyday with practical inputs and reflections and nurturing the seeds until it turn into beautiful flowers blooming together

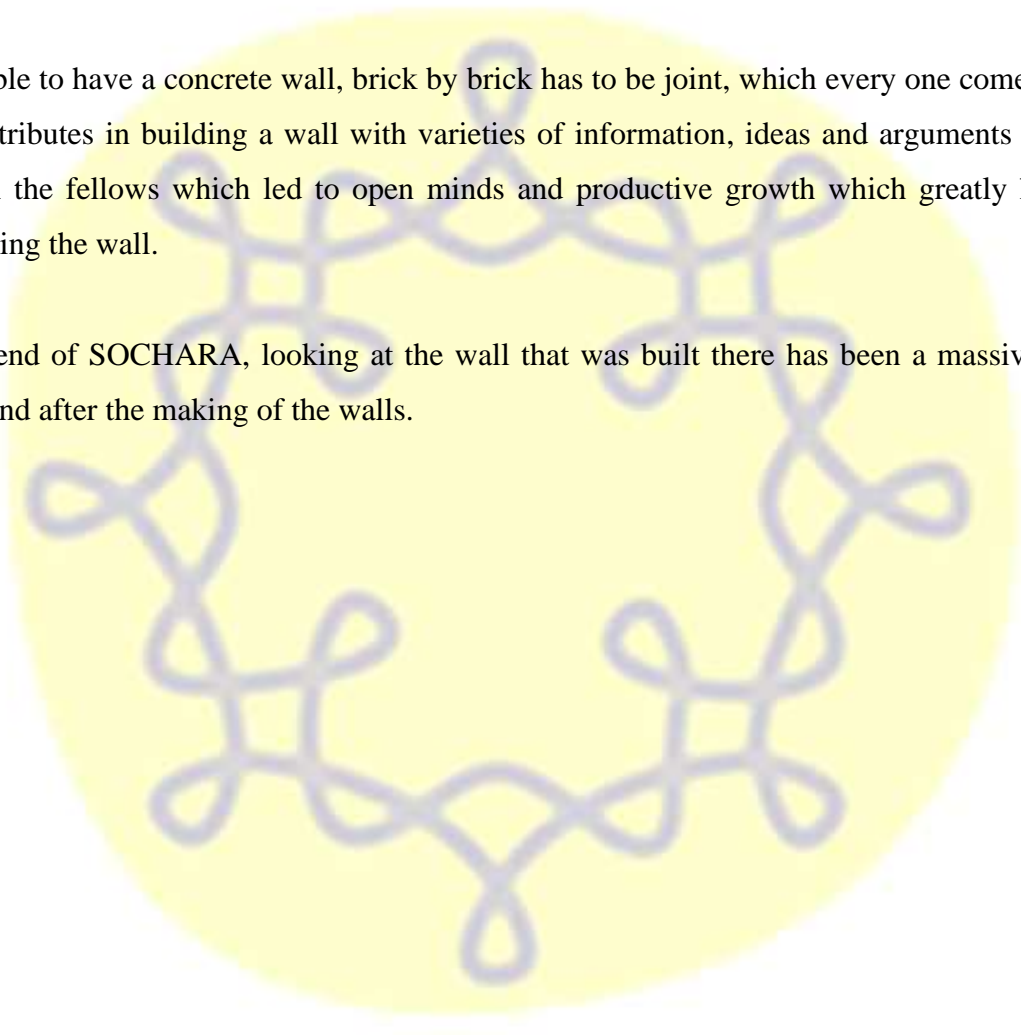


### *‘Bricks of learning, wall of change’*

A house to be good and long lasting it should be built on a strong foundation. It should be also constructed with strong and well shaped bricks with the right mixture of concrete. Bricks are like inputs I received everyday from other co-fellows, facilitators and field experiences, inputs includes personal, insight reflections and insight learning.

To be able to have a concrete wall, brick by brick has to be joint, which every one come together and contributes in building a wall with varieties of information, ideas and arguments on issues from all the fellows which led to open minds and productive growth which greatly helped in beautifying the wall.

By the end of SOCHARA, looking at the wall that was built there has been a massive change before and after the making of the walls.



## **My learning goals**

1. To acquire the insight learning on community health
2. To learn and acquire knowledge regarding community health and other health related programmes
3. To acquire practical knowledge and skills in community health approach
4. To understand the different kinds of problems existing in the community and to understand more in depth on the diversity of the different Indian communities
5. To be able to understand more about the different problems on the status of women and their role towards the society
6. To learn more on the effects and importance of maternal and child health
7. To understand and to learn more on health promotion and disease prevention
8. To become a trained scholar activist
9. To acquire deeper knowledge in conducting research
10. To acquire skills in documentation

## **Chapter- 1**

### **Learning from the collectives**

#### **Insight learning**

Before coming to SOCHARA, though I had a master's qualification in social work, after coming to SOCHARA I felt the knowledge I learnt was limited. At first after joining SOCHARA, I felt very uncomfortable to open up and to share my thoughts; throughout my educational journey I did not get much encouragement and a platform to share my thoughts and opinions. As the days pass by in SOCHARA, I started to get used to the environment of speaking and sharing thoughts and through it; it gave me more confidence to speak and exchange thoughts that has given me understanding in-depth on many perspectives and dimensions of reality. SOCHARA has given me the platform to express myself and to listen to different arguments and opinions on issues. Through everyday inputs and reflections on many perspectives as a community approach, it has helped me to create a shift from many perspectives to the community health approach.

#### **Balloonist view**

Working with the community, focus must be widened and broadened beyond any specific issue or problem, the whole community needs to be focused. Standing on a balloon and viewing from top at the whole community in a holistic approach.

In order to tackle community problem, the community itself need to be tackled first, that's why research, community participation is important.

#### **Understanding on health**

According to World Health Organisation (WHO) "*Health is a state of complete physical, mental and social well being and not merely the absence of disease or infirmity*".

The definition has helped me understand deeper that health is not just physical part of the body but also the inner part that includes the mind and the psychological and the relationship towards the environment, not just being physically healthy but also to be well. Physical health is equally important as the mental, social and spiritual aspects.

Being healthy doesn't confine only within the walls of hospital or any health care but it is more and goes beyond the walls of hospitals and medicines. These days health has become commercialised and that has also blinded many lay people to think health is all about medicines and hospitals. Curative part is also important but in today's context, curative is encouraged and is focused more by the health system. Prevention and promotion is equally important with the curative part, if prevention and promotion is concentrated on more, it implies the curative will decrease.

The first step of wellbeing is health and health is a fundamental right to all individuals without any distinction of race, religion, political beliefs, economic or social condition. In today's context, after 68 years of independence, health as a fundamental right for some sections in the society still remains a dream. One of the barriers that created failure to achieve the right is the prevalence of caste system, a silent killer that still divides the society and there are also other challenges that prevent people to attain their rights. Right to health doesn't mean only the right to be healthy but it also requires the government or the public authorities to put in place the policies and action plan which is available, accessible, affordable, and acceptable to the people.

### **Tap turner off**

This was the first concept that I remember that was greatly convincing and has made me to have a clear understanding on how to tackle health problems by not concentrating in the bio medical alone. My background is non medical and for me it has made me to understand better and help me to get the insight understanding on how to look on the other factors that affects by analysing through SEPCE (SOCIAL, ECONOMICAL, POLITICAL, CULTURAL, and ECOLOGICAL) factors of any particular problem and try to close the gap or address the cause.

## Paradigm shift

I came to SOCHARA with a predefined perspective about health; I had limited knowledge on health since I am from a non medical background. To me the concept of health lies within the boundaries of hospitals and medicines. In the first few sessions in CHLP has started shaping me and the process of refining started to take place, new perspectives towards health made me more clear from the daily sessions and reflections.

I have a background on social work; social work is somehow related to community health. I being a social worker, I had different perspectives on community in achieving objectives and goals. After attending many sessions and reflections and field learning in CHLP, the perceptions that I used to have about health or community and community health has given me a new lens to see and to have a deeper understanding Paradigm shift has taken place in helping me to focus on the SEPCE and to look at different levels from the individual level, family level, community level and to national level.

<b>The Paradigm Shift</b>		
<b>Focus</b>	Individual	Community
<b>Dimensions</b>	Physical/ Pathological	Psychosocial, Cultural, Economic, Political, Ecological
<b>Technology</b>	Drugs /Vaccines	Education and Social Processes
<b>Type of Service</b>	Providing / Dependence Creating/Social Marketing	Enabling /Empowering / Autonomy building
<b>Link with people</b>	Patient as Passive Beneficiary	Community as active participant
<b>Research</b>	Molecular Biology Pharmaco- therapeutics Clinical Epidemiology	Socio-epidemiology, Social Determinants, Health Systems, and Social policy

## Health for all



‘Health for all’ is a vision which 134 countries attended and by representatives of 67 United Nations Organisations in the Alma Ata Declaration in order to achieve by 2000 A.D. The declaration focus is on improving primary health care. After 2000 A.D. ‘health for all’ has not been achieved, there were many obstacles and challenges that the countries faced and one of the reasons was the economic crisis that the poor countries could not concentrate on improving the health status of its people. Privatisation became stronger and wider since then and gradually health has started to become a commodity, in order to get health one has to buy.

In order to achieve health for all, here turning off the tap plays a role in implying the removal of obstacles to health, which is elimination of ignorance, malnutrition, disease, unsafe drinking water, unhygienic surroundings, poor housing, proper sanitation, etc. To have a more people oriented vision, health services needs to be decentralised, to promote health education, to create awareness on precaution and prevention of illness or disease, allow traditional health care, to make people known on different medicinal plants that are available locally. Community participation or communitisation plays an important role in achieving health for all and by all.

### **Communitisation and Community Action for Health**

India after independence has a long struggle towards “health for all” today after 2000, India still struggles in achieving health for all. In 2005, the National Rural Health Mission (NRHM) started a programme focusing on the equitable, affordable and quality health care. NRHM is the first programme that focuses on the grass root level and working directly with the people through “communitisation”. Communitisation of the health system is one of the five pillars of NRHM, The term “Communitisation” basically is a process of the people, by the people, that helps in enabling the community people to own- up the health system and to empower them to know and to be aware of their own rights and responsibilities and to have autonomy over health.

Communitisation in health is a process that helps to bridge the gaps between the health system and the people. It is an ongoing process that involves community participation to work together to take action against any issues which directly or indirectly affects health, through this process it strengthen the sense of the “we feeling” among the people



Communitisation involves research about the existing problem that affects directly or indirectly the health of the people, which thereby action needs to be taken for tackling or solving the problem. Here the role of communitisation that involves community participation, community ownership, community involvement, community building, plays an important part in achieving the objectives and goals. Through communitisation pave a way to sustain and people would be enabled and empowered and they themselves would be aware on their own rights and responsibilities towards health and to have autonomy and to demand their rights over health.

### **Bottom-up and top-down approach:**

‘Health for all’ still remains a struggle, with the weak public health system; it worsens the health status, though little improvements had been achieved after independence. In order to have an effective or improved health status, public health system should have two approaches: top-down approach and bottom-up approach. Both are equally necessary to have an effective public health services, at the bottom level, the prevalent challenges would be heard from the community level to the top level where policy would be made and so as the implementations from the top would reached to the people at the community level.

Decentralisation is one of the examples of bottom-up approach, where all the decisions making can be made at the down or the community level.

### **Social determinants of health**

The social determinants of health are an important concept in community health that helped me to reflect on the underlying factors to look, learn, to understand and not to have a quick conclusion. This concept has helped me to develop deeper understanding at ground reality at the community level in my field work area.

SEPCE (Social, Economic, Political, Cultural, and Ecological) analysis is one of the ways to understand the social determinants of health. Health is a dependant on SEPCE factors, if any of these factors get affected, then health directly or indirectly, will be affected. For example: Consider malnutrition. Malnutrition is like the tip of an iceberg which is visible where many underlying

factors are the real problems. For example, less knowledge of feeding practices of the mother, poor sanitation, unsafe drinking water, poor housing, etc impact the nutritional status of a child.

### **Intersectoral collaboration:**

Health directly or indirectly relate with other departments, health cannot be separate or isolated from the rest but to work in collaboration with other departments in order to achieve better health and ultimately 'health for all'. In health planning, other departments should be included like departments of education, public health; engineering, public works, etc need to collaborate with each other, as the work of one department affects the other. There is a quotation about health that states how health affects everything:

*'Health is not everything, but without health, everything is nothing'* (cited from Schopenhauer, German philosopher, 1788-1860).

### **Axioms**

Axioms are the statements or ideas that are believed to be true at the community level as one of the community approaches to achieve health for all. They help to relate with reality at the grass root level of the community, involving the community to participate, to make their own decisions and help the community to have ownership over their right to health. The axioms of community health also include intersectoral collaborations, decentralise decision making at the community level, promoting and building community and strengthen the health system so that 'health for all' would be achieved.

### **Social vaccine:**

If there is an epidemic prevalent in the community, bio medically speaking, vaccines are given to strengthen the immunity of the people for future defence. So in the similar way, in community health, vaccines can also be given socially where it focuses on the social determinants of health in order to strengthen the immunity and would help in preventing and defending against any type of disease in the future which includes malnutrition, infant mortality rate, HIV etc.

There are so many things that through social vaccines which have helped to prevent or eradicate problems. Social vaccine is an idea that helps to turn the tap off which focuses on the root cause of the problem rather than using a 'mop the floor' approach. An example of social vaccine is giving life skills education and to build healthy relationship for preventing HIV and another example of social vaccine for malaria is preventing mosquito breeding and promoting bed nets which is not just by providing medicines to the people affecting.

### **Understanding community**

I have had the exposure working with the community in the previous years as a part of my educational course. SOCHARA has made me realise the importance of the attitude and behaviour while being with the people in the community. It has also helped me learn more on the importance of how to go with an unprejudiced and open mind, humility to accept, listen and learn from the community.

Community is more than the physical aspects; community is a concept where people together share common beliefs, culture, acceptance, etc. In future it has also made me realise the importance of people; if working in any projects, the ultimate targets should not only be the success of the project but the sustainability and people's ownership of the project.

There is a Chinese proverb by Lao Tzu, where Dr. Ravi Narayan mentioned to us in the collectives that has greatly inspired and impacted my approach towards the community:

*Go to the people*

*Live with them*

*Love them*

*Learn from them*

*Start with what they know*

*Build on what they have*

### **Equity vs. equality**

Equality is the approach that I before believed in having, getting or giving equal treatment which is fair and unbiased with no favouritism base on gender, socially, economically. After the understanding on the concept of 'equity', I was deeply convinced and motivated, I found myself now replacing equality with equity. Equity is more than treating equally; it means treating unequally in order to be equal. Equity means reaching the people who are unreached.

### **Appropriate technology**

In community health, using an appropriate technology is highly needed in helping to solve the problems. Here appropriate technology plays a major role in helping to solve the problem as it is scientifically effective, culturally acceptable, and economically feasible.

An example of appropriate technology is what we have seen at FRLHT, where a spiral of copper coil is used to purify the drinking water. The copper coil that cost Rs 600/- approximately which is one of the simplest and cheapest ways to purify water which doesn't require any energy to function and which last a lifetime and is easy to use in a rural household. It helps in purifying water just by keeping the coil in any water container for overnight. In most parts of the rural India, many villages still struggle to access safe drinking water; the copper coil would be an appropriate technology to meet this need of the people.

### **Globalisation**

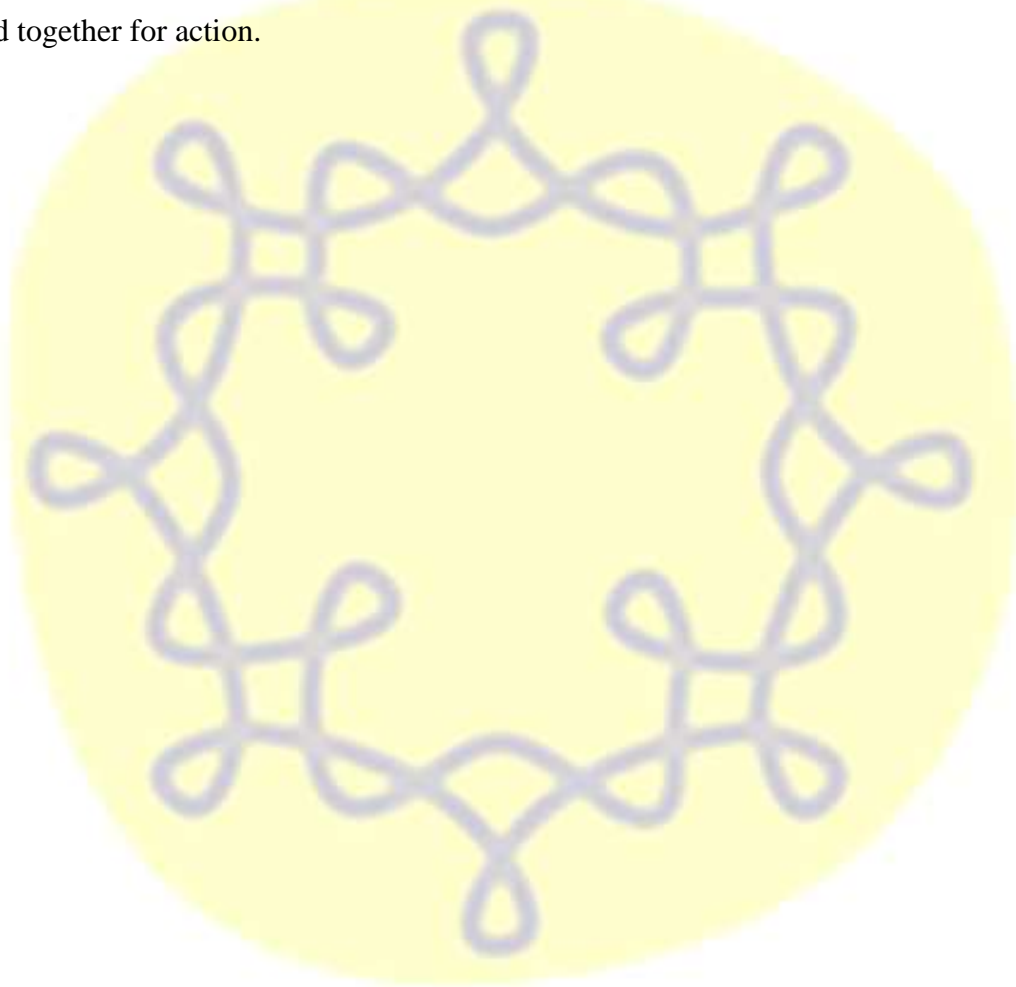
Globalisation is the processes of building a global village where all countries connect with each other, taking trade into an open market. It is one of the terms that I have been continuously hearing throughout the sessions which I started to feel uncomfortable with, upon knowing the negative impacts of globalisation which directly and indirectly affect health. In today's world, the ill effects of this phenomenon have a control over the people especially in matters of health where as a result health has become a costly dream for the poor.

### **Research**

SOCHARA has opened up more ideas and has educated me on the implications of a research study. I have gained a deeper understanding of the importance of ethics in research that protects the rights,

confidentiality and dignity of the respondents; as well as the knowledge translation of the data collected.

Another new term I was introduced to during the sessions was regarding a new model of conducting research. It is participatory research and participatory action research. Participatory research is a type of research where community also take part within the research study whereas participatory action research is an action oriented research where community participation is involved together for action.





## **Chapter- 2**

### **Presentations**

#### ***i. Journal club***

Journal club discussions provide a forum for discussion where certain articles and research studies were presented. The journal club, has helped me gain a deeper understanding on different researched issues and has given me a new dimension to critically reflect from and to analyse; it has helped me understand the importance of critical thinking.

#### ***ii. Field work presentation***

We have 3 field works and 3 presentations. All my co-fellows have travelled to different field areas covering many states. During the field work presentations, all my co-fellows would give presentations about their own field experience, representing varieties of cultures, beliefs, demographics etc. It's like bringing the entire field experiencing of all the fellows under one roof and has given many dimensions on understanding more of community and community health approaches.



## Chapter- 3

### Games

#### *i.* **Power walk:**

It is also called as games of division; it was a privilege for me to able to play this game, which has given me a deeper understanding of how it is to be a person from the lower caste and lower class. A person who is a female and a dalit is most likely to be at the lowest level in the hierarchy, females can never go ahead, and if caste changes there would be a lot of future changes in the person's circumstances.

#### *ii.* **Monsoon game**

Another game of division, monsoon game is an experiential game that one has to experience while playing, it's not just a game It makes one realise and feel the existing conditions of the landless farmers who struggle for survival

## Chapter- 4

### Inner Learning

#### ***Johari window:***

Johari window has made me realise the borderline of the things I know, the things I don't know but others know, and also the things that I know and others don't know. There are certain things that we are conscious about and those that are in our sub conscious and the things we know and there are things we don't. Johari window explains to us the public life, Secret life or the private life, the unknown life and the blind life.

#### ***Communication:***

Communication session has tremendously impacted me personally; all the sessions I attended have helped me to rediscover myself on the capacities that helped me to come out.

Life is all about relationships and to maintain or build relationships, communication is greatly necessary. Communication is important to realise the importance to build communication within us (intrapersonal) and with others as well (interpersonal). Communication also plays an important role in community involvement and participation by creating interest in them. We should remember there are 3 types of people in the community:- the visual (seeing is truth), auditory (hearing is truth) and kinesthetic (feeling is truth)

There were some important points that struck me

- Communication helps in building relationships
- The process of learning is absorbed through our 5 senses or the gateways i.e., through eyes we see, ears we hear, tongue we taste, hands by touch and nose by smell
- To be able to solve problems by 90%, we need to sharpen our senses by exercising it daily and by allowing data to enter and decreasing deletion and generalisation. When senses are sharpened, 95% of our right brain is sharpened
- The importance of active listening and listening to understand
- Importance of positive strokes that help in motivating lives

- Importance of voice modulation
- In arguments always separate a person and an issue
- There is a great ability on ourselves which there is no difference from any famous people and us, all the brain sizes are the same, but what is the difference is the inputs we receives.
- In order to experience change in behaviour, the impact has to go to the unconscious level
- It has helped me to understand our own behaviour for changed, when knowledge goes to the unconscious level, a person will experience change.
- To overcome the fear is to focus, to involve and to have clarity on the goal by practicing it many times
- Listening skills: SOLER and UPISE
  - i. S: to Sit straight
  - ii. O: Openness with no preconceived notion
  - iii. L: Lean forward
  - iv. E: Empathy
  - v. R: Relax
    - i. U: listen to Understand
    - ii. P: listen with Participation or listen Patiently with no interruption
    - iii. I: listen and to show Interest by having eye contact, verbal acknowledgement, head nod and body orientation
    - iv. S: listen to Support and to avoid arguments
    - v. E: listen with Empathy

## Chapter - 5

### Organisations visited

#### ***CHES***

Attending CHES workshop has helped me have a deeper understanding on the problems or the impacts of coal mining, in the workshop, groups of people came from different communities and those who were also working in the coal mining affected areas.

It was an eye opener for me to hear stories from the people representing different communities affected by coal mining and how the environment was polluted and how the people were more affected.



#### ***Foundation for Revitalisation of Local Health Traditions (FRLHT)***

It was a privilege for me to visit FRLHT campus. It was a first time for me to have an exposure which is close to nature, I greatly appreciate the work of revitalising the traditional medicines, in today's world where we are so caught up with the advancement of Allopathic medicines that we almost forgot the simple home remedies that our grandparents once depended



on. In CHLP I learned 3 public health system, and here I had learnt that there should be 4 tier system which home and community should be the first place of the health system which would help the people to become the providers not the receivers and would solve 30-40% of health problems. Then if the health problems are not solved then the people can be refer to go to PHC, CHC or other health care for treatment.

Traditional medicines and the strategies used by the traditional healers are not kept track, I found that documentation and proper orientation and training is greatly needed to preserve the traditional

knowledge. It is also necessary to recognise the traditional healers so that they can be a part of the health delivery systems thereby taking back health services to the villages.

FRLHT also encourages community participation in reviving the traditional medicines at the community level; they also promote appropriate technology by using copper coil for safe drinking water at the community level.

### ***Visited CHC, Kolar, Bhopal***

Visiting CHC was my first time; the CHC is located in Kolar, Bhopal. , I was surprised to see the size of it. It was a huge structure compared to what I had seen in Meghalaya. The CHC was clean and newly constructed.



The CHC covers 2 PHC (Primary Health Centre) covering 85 villages with a population of 65000 rural populations and 131000 urban population having 40 beds (30 beds in general ward and 10 beds in emergency). The departments it includes are gynaecology, paediatric, surgery, NRC (Nutritional Rehabilitation centre). The facilities they have were x-ray, dressing and injection, pharmacy, pathology, labour room, operation theatre, medicine storage room, and kitchen. There were many people in the OPD and mostly were women but men were few. There



**Pic:: Interacting with doctor, CHC**

There were many people in a queue waiting to enter in all the 7 medical doctors and 1 Unani doctor. I saw inequality that the Unani doctor was being room wise. All the Allopathic doctors have a separate consultation room near the entrance on the ground floor whereas the Unani room was at the first floor which was far corner from the public eyes. The room was small and has to pass through a small room to reach the Unani cabin.



When it comes to the maternity ward, there were two wards i.e. normal delivery and caesarean. Women with normal delivery were more compared to women who had caesarean which have smaller number of beds still have empty or unoccupied beds.

There was also NRC (Nutritional Rehabilitation Centre) where curative approach was made by the government towards the severe malnourished children. It's being taken care of and looked after by one feeding demonstrator cum counsellor and one ANM (Auxiliary Nurse Midwife). According



to this programme, counselling to the parents is provided on child care and therapeutic food is given to the children for 14 days and after their discharge 4 follow up will be done to all the children which either anganwadi or the ASHA can bring the children to the centre.

**Pic:: Pictures taken before admitting and during the follow ups**

### ***Visiting an orientation at Ekta-Parishad***

The meaning of Ekta-Parishad is unity forum. Ekta Parishad is a people's movement; it was started from Madhya Pradesh by RajGopal in 1991. Discussion about Gandhi had been everywhere where RajGopal didn't want to end up discussing about Gandhi but he also wanted to practice his style and principles. Chambel (a junction of Madhya Pradesh, Uttar Pradesh, and Rajasthan) it



is a well known place for violence, RajGopal chose Chambel and work with the gangs. After working with this group of people, they finally surrendered all their armaments. So RajGopal found out the root cause of the violence issues are associated with land so he decided to focus to work

**Pic:: Ekta Parishad**

on land issues. If there are no land issues, more than 70% violence will be reduced. The movement focuses on 2 things: organizing a series of youth camp (to train and empower) and foot march. Foot march has played an important role in capturing the attention of the government in order to



achieve their goal. In 1999, a foot march of 3,500km was made where after, the government of Madhya Pradesh declared a task to discuss on land issues and thereafter around 3.5 lakhs of people got land. Ekta Parishad as a non violence organization believes in more dialogues which fight for injustice of the marginalized people and at the same time talk to the government and to fight against the government. Through Ekta Parishad, people also had a platform that they could address their problems they faced, could participate and contribute in many levels. They played a big role in communitisation, which motivated the people and the youth to create a sense of unity and responsibility to fight for their own land and their problems.

Ekta Parishad is a national movement which followed the Gandhi approach of non violence; it has created a great impact on the people's lives. The approach of Ekta Parishad was very simple but has an effective consequence in changing the policy by the government.

And thereafter we visited the Mahatma Gandhi museum where they displayed his journey as a freedom fighter. There also other freedom fighters along displaying their visits to Madhya Pradesh. The museum has amazed me with different kinds of pictures displayed that showed and described the life journey of Gandhi, the pictures displayed were excellent but everything was written in Hindi which was a hindrance to my learning.



Pic:: Inside Mahatma Gandhi museum

### ***Visited to Madhya Pradesh Vigyan Committee***

Madhya Pradesh Vigyan Committee was started in 1984 after the gas tragedy that took place in the same year, the organization focused on the post gas tragedy where it organized people to help the victims who were infected by the methyl isocyanate gas affected and the local people who inhaled the poisoned air that affected their lungs and their health. The organization also gave

support to the health sector in order to improve the health system. It also focused on the problems based on environmental issues which also they conducted survey and prepared a report after the gas tragedy



The organization has a training centre, which gives training in different kinds of agriculture activities. It also helped the people in Karhal, Madhya Pradesh in promoting and marketing the products produced by the tribal people like the honey. The organisation also works mainly with

Pic:: MPVS

the tribal communities and promoting sustainable livelihood and for conservation of the environment and its cycle. My colleagues and I met the staff of the organisation where we had a discussion about the tribal issues. In some tribal areas, a huge amount of money had been spent by the government to bring development and improve the status of the tribal. And at the end of the project there was little or no change at all and also there were cases found that many people could have earned and generated the money for their livelihood, but since they have no saving accounts they misused the money in alcohol intake and also they would try to finish all the money before they sleep.

One of the most interesting parts from the discussion was the role and importance of honey bees and beekeeping. Honey bee is a significant insect for pollination and for forest ecology, traditionally they burn the hives and extract the honey and therefore they destroy the population of honey hives. There's a technology introduced to extract honey without damaging a honey hives. This technology has helped in preventing the bees and their hives from being destroyed. Honey plays an important role in the ecosystem where if the honey hives are destroyed then the population of the honey bees also would be reduced where it would affect direct and indirectly the ecosystem. The honey bees play an important role in pollination where many plants depend on them for



Pic:: Beal fruit and products like Honey and beal drinks

their reproduction and if the honey bees are less or destroyed it would affect the production in plants and agriculture.

In the discussion, I also learnt that a fruit called 'Beal' also has a great nutritional and medicinal property; it's very good for the prevention of diarrhoea and millets also are a very good source of nutrition. The people having access to these fruits, would not prefer to eat these fruits but would prefer to get medicated which they thought is more effective but didn't know its side effects.

In getting funds, MPVS preferred to get funds from Indian based funding agency, according to them they said that the International funding agencies gave funds easily but these funding agencies has their own targets and objectives. The funds that the MPVS got were from the Indian funding agencies, in the discussion they clearly mentioned they first identify the local needs of the people then they would decides the projects before approaching any funding agency from an Indian funding agencies who would support the project.

### ***Visited Protest conducted by Ekta Parishad:***

Ekta Parishad conducted a programme for protesting land rights; we visited the programme where more than hundred people were gathered. The programme was in Hindi which was difficult for me to understand in depth about the problems of the farmers but it was a privilege to be able to witness the participation of the farmers in the gathering and how the people came together for a purpose in sharing their own problems relating to land issues.



**Pic: Meeting conducted by Ekta Parishad**

It was first times for me seeing farmers from different places came together in one place and address their own problems. It's also good to observe that they were encouraged to shared and speak publically.



### ***Visited district hospital, Bhopal***

District hospital is a secondary level health care to the people. The district hospital is located at the heart of the city; people would come for treatment from within Bhopal and outside Bhopal. The hospital looked busy with people who were standing in a queue in the OPD (Out Patient Department). We had a brief interaction with one of the doctors where we got brief information about the hospital where the average number of patients who come for OPD everyday is around 1500-2000 per day and per year the number goes to around 7 lakhs. The staffs compose of 65 doctors and around 500 other staffs. There are different departments which includes 4 Operation theatre, blood bank, maternity ward, a newly constructed emergency and OPD setup, dialysis unit, ENT (Ear Nose and Throat), ortho department, eye clinic, AIDS (Acquired Immuno Deficiency Syndrome) clinic, adolescent clinic, family planning unit, hematology, biochemistry etc.

We got the permission to walk and visit the hospital where the counsellor of Family planning department accompanied us and took us all over the hospital. She was very friendly and helpful. We visited NRC (Nutrition Rehabilitation Centre), it has 10 beds overall and it is a place to rehabilitate the children from 2 months to 5 years who suffer from severe



**Pic: NRC**

malnutrition. These children would come from anganwadi, CHC (Community Health Centre) or from OPD. There are 2 screening being done if the child has medical complications (like diarrhoea, pneumonia, etc) then they will be taken to phase-I where treatment would be given to them and if the child is normal then they will be taken to phase-II. Regular feeding is focused on the children where daily assessment on their heights and weights in the chart which would be taken in order to see the changes for 14 days and then there would be follow ups after the discharge.



**Pic: Iceberg-only 1/4th of the body mass is visible**

I observed the NRC though is clean but it looked congested, the mothers also could give full attention to their children since she have nothing to do, I can also say that in NRC the mothers have the time to spend their time with their child. NRC is good to have for an immediate cure but it doesn't give any solution to eradicate malnutrition since it is only a curative providers but not taking any preventing measures though counselling is also given to the parents in order to help the child to grow. But since malnutrition has so many hidden factors that only a very few areas of the problem is visible. So treating the visible part of the problem wouldn't help to eradicate malnutrition, in order to treat malnutrition there are so many things that needs to analyse first and that needs to be addressed and that needs to be solve

We then visited blood bank where we could interact with a staff where he explain to us about the blood bank, in the blood bank, safe blood is taken from a healthy volunteer (age from 18- 60 years). Blood bank is like a bank where blood is being deposited and also being used to give to patients in need. The blood would be taken for 350 ml and is kept at a temperature between 2°-8° Celsius. There are different types of blood group-A, B, AB and O which was place differently inside a refrigerator, a pre-testing is taken which test is made to find out any presence of any blood transfusion diseases like malaria, hepatitis B, AIDS etc. before giving the blood to any patient. Cross matching is also made in order to find out if there is a reactions or not when the blood of the patient is mixed with other blood.



**Pic: A baby manikin is displayed for giving training**

We visited the milk bank; it was my first time I am hearing about milk bank. It was really interesting for me to learn about it. The milk bank is also like a bank where milk is being deposited by the mothers by using the pump machine. Milk is being taken from their mothers to feed the same children who are not well who were admitted in the ward to SCNU (Special Care Newborn Unit). The



**Pic: A refrigerator for storing milk**

babies are admitted with complications like prematurity or any other complications during delivery



or they have to get some special treatment. Milk is kept for 8 hours in a room temperature but it can extent to 3 day kept at a low temperature and then the milk would be discarded.

We lastly visited a training centre which gave training in enhancing and updating the skills of the ANM (Auxiliary Nurse Midwife), GNM (General Nurse Midwife) and to doctors as well. They also gave training on how to give an immediate care to a new born baby and also how to do child delivery.

### ***Visited Sambhavna Trust***

Sambhavna Trust started after the gas tragedy which took place in Bhopal, on 2 December 1984, Sambhavna Trust existed due to the gas tragedy which had caused many deaths by a poisonous gas that came out from the factory. The factory is located about 400 meters from the organisation which was set up in around 1969-70. The factory started as a production facility for the pesticides to sell mainly to the cotton growing districts in Madhya Pradesh, one of the chemical the factory is making is methyl isocyanate (MIC). Though the factory is located in Bhopal but it was control from USA which was run by the company name Union Carbide India Limited, which 59% of the company shares was held by the American company and everything was controlled by the US Corporation. The USA Corporation made the design of the plant, and also the design of the waste of the plant. In America there is a similar factory which used to produce MIC which the material was used was stainless steel but the design of the Bhopal plant was very differently, which was used with the mild steel. Then there were additional safety features in the American factory which was not in Bhopal factory. And one big difference was the tank which MIC was kept, in the America tanks which were used were much smaller whereas in Bhopal was larger, in case if it leaks, if it's in a small tank, only a small amount will be leaked but if it's in a big tank then a big amount would leak and they wanted to cut down the cost which reduced to 25-30%. MIC has to be kept at less than 0° degree temperature but the company had stop to use the refrigeration unit in 1982 in order to cut down the cost which turn out to be one of the major cause.



In September 1984, in Bhopal there was a small leak which happened where the gas came out from the factory plant of the US company on the mid night of 2<sup>nd</sup> of December 1984, there was a leakage from the MIC tank and the gas came out for about 100 feet high. The gas got mixed with air which then formed into cloud, the thick and heavy cloud spread the nearby areas and also moved towards the city, the first affected community was Jay Prakashnagar which was in front of the factory. The place was quiet and calm, there was neither warning nor sirens, then people started to woke up from their sleep after being exposed, they started choking with tears in their eyes and coughing. People were not aware what was happening and was helpless, they started running away to get help towards the hospital, which they ran in the same direction along with the gas. People were clueless of what was happening with their bodies and many died on spot. The number of people who were exposed to the gas was half a million.



Pic: The effects of the gas in the post gas tragedy

The government on the other hand looked like it tried to support and cover the Union Carbide company. The affected people got a very few amount of compensation of rupees of 25000/- which they had already spent more than the amount. There was so injustice being done to the affected people in many areas. The sad thing to know was that there was no action taken against the company.

Sambhavna Trust work with the people in their health related issues where it gave treatment to the gas affected people by treating them with Ayurveda which is the natural remedies and only to get an immediate cure, Allopathy is



Pic: Hair oil and Massage oil being made

provided. The purpose of providing Ayurveda medicines was to detoxify the chemicals from the body with the herbal medicinal plant. The medicines were made inside the centre and also there was a botanical garden which has 150 species of medicinal plants to use in making medicines. Exploring inside the botanical garden, was exciting and surprised to find out the plants which I had seen in my native place was actually were effective medicines. I feel most of the plants has an effective medicinal properties but only one thing we don't use it is the ignorance and we are not aware of its uses.



Pic: A botanical garden

### ***Visited Tamia, Madhya Pradesh***

Tamia is a small town which has many tribal populations of 90%, it is one of the blocks located in Chhindwara district, Madhya Pradesh. Its landscape is beautiful and is mostly hilly and has the highest village with 1200 m above sea level.

We were able to visit many areas under Tamia block; there are 90% of tribal population which mainly includes Bharia and Gond. We had an opportunity to visit the primitive tribe called the Bharia tribe in Cidholi, entering inside the village, having narrow roads, the houses mostly made of



mud which looks clean from outside and are close with one another. The socio-economic status of the Bharia community is below poverty line, their education levels also are low, they mostly engage in agriculture. The people are friendly, living a very simple lifestyle. There are a number of government services they receives which I observed, there's an anganwadi centre by Integrated Child Development Scheme (ICDS), there's also a road constructed by Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), toilets by Total Sanitation Scheme (TSS). Though a few developments have reached the people, but there is still a big gap of differences in regarding their standard living.



There's a specific place in the community where the Bharia community would keep the statues made of clay of the expired people as their remembrance for their own family members who have expired.

As like the other tribal people, in the Bharia tribe, the women also have tattoos in their both hands. But now in the present generation, using tattoos is declining, with the coming of higher education, the girls don't prefer anymore to have tattoos in their hands. They believe after dying, the tattoo also will go along with the spirit.

The health system under Tamia block has levels which includes: 1 Community Health Centres (CHC) and 4 Primary Health Centres (PHC) in Dela khari, Chindi, Chawalpani, Gaidubba (not functioning), 1 PHC covers 5-10 sub centres

With the help of Dr. Vijay Singh, the medical officer of Tamia block who was able to give time with us for a brief discussion and also was able to get permission to visit the Community Health Centres (CHC).

The CHC was close due to the Dussehra festival, which surprised me, which accordingly any public health care supposedly should be 24x7, except in delivery ward and NRC remained open. There are 2 separate CHC buildings, the old building looked old, dusty and unhygienic. The patient's charter was not found, the list of 107 medicines in CHC was hung. There are less staffs under the CHC including the doctors, the medical officers has to do multi task works and so as the other staffs. I observed there were hardly 30 beds according to the Indian Public Health Standards (IPHS) where there were 8 beds in the general ward, in the old building and 10 beds in labour ward and 10 beds in Nutritional Rehabilitation Centre (NRC).

There is no operation theatre and neither a surgeon, if any surgery or a caesarean needs to be conducted, it is being referred to the next level in the health system i.e., district hospital.

The CHC has less facilities with less staffs, covering more than 1,00,000 population is still have many loop holes, and many poor and under privilege people are very much dependent on the health system that the government offered.

We also visited the bottom most in the health system i.e., the Sub Health Centre in Dhusavani village. The centre covers 5 villages with 5000 population having 5 Accredited Social Health Activist (ASHA). The sub centre looks small and clean and so as the Auxiliary Nurse Midwifery (ANM). In the centre it provides services like Ante Natal Check up (ANC), Post Natal Check up (PNC), immunisation, identification of anaemia, malaria, leprosy and tuberculosis, and other minor sickness like cough, fever, cold, diarrhoea, worm infections, institutional infections, etc. It is also acts as a referral services that refers to the nearest PHC/CHC.

We also visited the anganwadi centre which was nearby the sub centre, anganwadi centre is a place which is often visited, but this anganwadi centre surprised me inside and outside, in all over the walls I found colourful walls with beautiful artistic paintings in it. Apart from the paintings, everywhere looks clean including the children, there were around 10-15 children and I found the children were busy colouring and playing with toys. They look well nourished compared to the other anganwadi centre I had been. This anganwadi functions well like the other anganwadi centres which provides supplementary food, immunisation and health checkups for pregnant and lactating mothers, preschool educating etc. I observed the anganwadi centre is a good example to all the other anganwadi centres



## Chapter-6

Learning by doing

*Bricks of actions, Wall of change*





### *Sunset view, Bhopal*

Bhopal is the capital city of Madhya Pradesh which is located in central India and is known as the *City of Lakes* for its various natural as well as artificial lakes and is also one of the greenest cities in India. Madhya Pradesh has 51 districts. Bhopal total population is 23,68,145 (Census 2011). The sex ratio (females per 1000 males) is 931 according to census 2011. Bhopal is under Bhopal Municipal Corporation that spread over an area of 285.88 km<sup>2</sup>.

Bhopal was founded by Raje Bhoj in the 11<sup>th</sup> century but the present city was established by an Afghan soldier, Dost Mohammed (1707-40). Once upon a time Bhopal was once ruled by Begums for more than 100 years and it was a princely state until India got independence. Bhopal is divided into 2 major areas: the old and the new city: Berasia and Huzur, Huzur, is more urbanized with nearly 90 % of its population residing in urban areas. Most of Berasia subdivision is rural comprising of nearly 285 villages. Minority religious groups together comprise close to 26% of

the district's population. In terms of their population share, Muslims constitute the principal community among the religious minorities of Bhopal.

Now Bhopal is a growing and a fast city, advancement and development in and around the city increased. Road connectivity and public transportation is well developed in and around Bhopal. There is also a large scale of working population both in the public and private sector. Population too is growing attracting people coming from outside Bhopal and also outside Madhya Pradesh. With such advancement in the city, like any other big cities, there are also many slums in and around Bhopal, notified and unnotified slum. In Bhopal, presently there are more than 300 slums in Bhopal, one of the slums in Bhopal called the 12 (Twelve) number slum located at the south east Bhopal where I was placed for my field work

Bhopal is a developed and a beautiful city that attracts many tourists including myself, on the other side of the city there's an unpleasant view where slums were located.

Throughout my educational journey and educational exposure I had experienced before, all were incomparable with the experiences and exposure I had during the field works. I was placed in Bhopal, experiencing Bhopal has given me a wonderful experience that helps me to think, reflect, to grow and an insight inputs. The experiences have helped me in experiencing more at the bottom grass root level, understanding more of the ground reality level and as well from the balloonist view. Through the collective sessions had helped me to go to the community with an empty mind with no prejudice and from the Chinese proverb which greatly inspired me when working with the community

*Go to the people*

*Live with them*

*Love them*

*Learn from them*

*Start with what they know*

*Build on what they have*

The stay in Bhopal was pleasant and comfortable and on the other side of the coin to think about the people I worked with was not very pleasant to look at the place they stay. The people have no proper housing with semi kutchha houses and with extremely small or no space in front of their house, the road are also very narrow which was not properly constructed. The drainage system was not constructed well where many areas the drain overflows through the road; there was no proper garbage disposal. Most of the houses do not have toilets and so they have to do open defecation outside in the open air, there were some areas around multi buildings which were constructed under a scheme JNNURM (Jawaharlal Nehru National Urban Renewal Mission) which had attract people to do open defecation. Some people were least bothered to construct toilets since they don't have space to construct and also they have been used to going for open defecation. There were also so many animals that people rear like goats, chicken and cows these animals also added to make the surroundings unhealthier by producing bad smell to the air, covered the roads by their faeces, and also the flies would sit and surround these animals.

The picture of the area and its surroundings were not suitable to look at but the people had been staying there for decades and were used to the environment. I observed many men would gamble outside at the road side, most of the men were unemployed and depend on their wife for earnings. I observe very few girls would go out from their houses and most of the children were playing outside in the road ways which they are prone to the dusty and unhygienic environment.

The first slum I focused was Gulabnagar, overall, like any other slums, Gulabnagar too has a similar characteristics as like the other slums in any part of the country, which is overcrowded, small houses and narrow road etc. In Gulabnagar slum, it consisted people of diverse culture and community from within Madhya Pradesh and as well as from the other states as well. The roads are narrow and cemented; the houses are small having 1-3 rooms and are joined and attached to the each other. The community people are much socialised, most of the time the women would sit together and chat with one another and as well as the men.

Like any other slums, Gautamnagar and Indranagar also had similar characteristics that include improper housing, improper water and sanitation facilities and other necessary amenities.



My second field work, I focused in Indranagar where geographically was bigger than Gulabnagar, I observed it was more crowded with people and houses and many people were poorer than in Gulabnagar.

### **Differences between anganwadi centre in Gulabnagar and Indranagar**

At the anganwadi centre in Gulabnagar had one medium size room and one small room for washing, there was no toilet facilities and there was no tap water. The roof was low and during day time, it was extremely hot to stay inside, there was a small free space outside the centre where most of the services provided in the anganwadi centre were conducted outside which included seating of children, immunization day. The qualification of the anganwadi worker was highly qualified holding a post graduate in sociology, due to her qualification she was holding; I found she was more aware on her role and responsibilities and was alert the things happening around. She also was very helpful in providing information and would willingly share her registers. In my 2 months observations, apart from immunisation day and weight monitoring I observed other activities that held that included godhbharai, giving supplementary food for the pregnant women, lactating mothers and adolescence girls.

In the anganwadi centre at Indranagar, had a medium size room, the room was congested and looked unhygienic. There was no toilet and no water tap, water had to be fetch from outside, the anganwadi worker was very active but she had less time in spending with children, she had other works like filling her registers, attending meetings regularly, meeting the mothers etc. The anganwadi networked quite well where she gets help and gives help from and to the other anganwadi worker nearby Indranagar.



## Chapter- 7

### Case studies

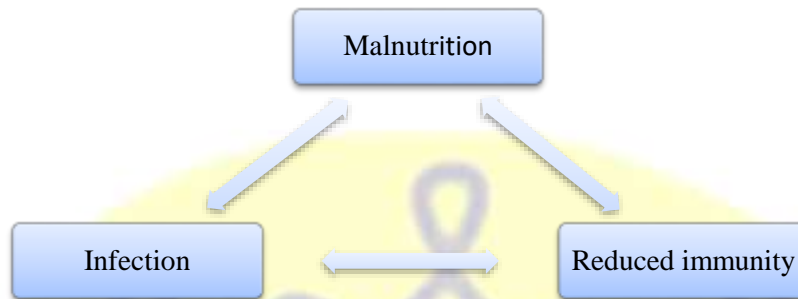
In my field work, it had helped me more by doing, my focus was on nutrition, I received many inputs from my mentor Dr. Ravi D'Souza. In the field I encountered different children who were normal and as well as undernourished.

The child named was Raju, he had 2 siblings a brother aged of 9 years and a sister of 4 years. The family was a big size family and they were expecting another new member into their family. The family income came only from the father who was a daily labour who worked outside Bhopal and his mother was a home maker, there were days that the family had nothing to eat when the father didn't come home as expected. The family was very poor. The children mainly depend on the supplementary food from the anganwadi centre, the children were not going to school and the anganwadi centre was the only school for them. His mother wasn't able to take care of herself, at the time she was 11 month pregnant and was underweight with just 37kg. After delivery, Raju still needs a lot of attention and care; he was left with no primary care from the mother and the care and attention he used to get got diverted to his new born sibling.

The overall nutritional status of Raju, from the social determinants of health approach was that the malnutrition is just the outcome which was like a tip of the iceberg, other factors underneath that impact the nutritional status that led to the child to be malnourished. Nutrition was not the only factor that caused him to become malnourished, there were many other factors that affected him to be malnourished. Raju was malnourished, he frequently fell ill and because he was malnourished, his immune system also was deteriorating and because of the low immunity, his body didn't have much capacity to fight against any infections. Malnutrition, Immunity and infection is like a cycle, malnutrition leads to many infections due to low in immunity, and also sometimes occurrence of infections also leads to malnutrition

The environment played an important role in affecting Raju health, the surrounding was unhygienic and flies were everywhere. Raju frequently fell ill either by having cold or diarrhoea, and he was severely malnourished, the food habits and the unhealthy environment affected his

immune system also. Because of the low immunity, his body didn't have much capacity to fight against any infections. Malnutrition, Immunity and infection is like a cycle, malnutrition leads to many infections due to low in immunity, and also sometimes occurrence of infections also leads to malnutrition



Malnutrition also closely linked with poverty, the family was poor to afford the basic necessities on life

*The intervention:*

I made an intervention by feeding 1 severely malnourished child under the guidance of Dr. Ravi D'Souza, the duration of the intervention was 1 months where feeding and growth monitoring was used daily. The child named was Raju, he had been admitted to NRC (Nutritional Rehabilitation Centre) and he was still severely malnourished, there was no difference. Through him, I could clearly see that the program implemented by the government is a top down approach and it is a floor mopping approach though it was a good initiative taken by the government, but it there are many loop holes on it and has failed to eradicate malnutrition from the community. NRC itself is not an appropriate technology approach where therapeutic food was given to the children and when the child goes back to their home, malnutrition?, social vaccines, curative

<b>For 1 kg of a child</b>	
<b>1</b>	100 ml milk
<b>2</b>	10 gms atta
<b>3</b>	10 gms sugar/gur
<b>4</b>	5 gms oil
<b>Time</b>	8 times daily

<b>Method</b>	Mixed the milk, atta and sugar, add to flame, stir it, then add oil, continuous stir for atleast 3-4 minutes, serve it.
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Before the intervention, the starting weight was 5.7 kg, the food prepared needed to be given 7-8 times in a day and nothing else. I also found out the mother also feed him other food which was uncovered and unhygienic, I observed there was a lack of co operation from the mother since mother plays an important role in child care and feeding practices. Intervening Raju was more difficult, when his weight started to increased he would get sick like loose motion, fever or cough where he also lose his appetite and this was how his weight either went down or became stagnant.

Raju was 1 year and 11 months with 5.7 kg, he looked very different from the other children, his face was bigger than his body, had a big belly and thin legs. He had not walked yet, his facial expression too tells something about his own well being, he often cries, and hardly smiled.

**Meera background:**

Meera, 1 year 7 months who was also severely malnourished with 5.7 kg, accordingly at her age the ideal weight is 8.5 kg she had 5 siblings and she was the youngest in the family. Her father was a seasonal labourer and her mother was a home maker. The family size was large and the income was insufficient to support the entire household, the family was very poor and stay in one room. The surrounding was very unhygienic with many flies all over the place; the environment plays a very important role besides good nutritious food in keeping the child healthy with clean environment and good sanitation system. Interacting with the mother, she prefer to have many children because they had the fear that only few of them would survive, her sister-in-law who lived nearby who had 7 children, by the time they reached 5 years old all her children died due to malnutrition and other diseases that affected them.

Her mother was surprised that she never gain weight inspite of feeding her at home, theoretically, if a child doesn't gain weight it is one of the signs of malnutrition, she either couldn't walked or had a proper speech, she was always sat idle. Her situation was similar with Raju, she frequently

fell ill like diarrhoea, cough and fever which making her body weight growth to become stagnant. The anganwadi worker had insisted several times to Gindi to go to the NRC to get admitted for Meera but she was not willing to go since she had to look after the other 5 children. The father hardly shared any responsibilities in child care, he only provided financial support like the basic requirements to the family, she herself too was uneducated and lived in a quite patriarchy family environment since her husband would never allow her to go out. All her life she had been living all her life within the four walls of the house where her husband never allow her to go out since traditionally wives were not allowed to go out of the house except during emergency which needs to be taken to the any health care centre.

She herself was underweight and had multiple deliveries in the past, all her 6 children were delivered at home, she had no or little knowledge about the importance of family planning, she took the pills very irregular which she received from the anganwadi.

**Sita background:**

Another severely malnourished child named, Sita, 7 months old with 3 kg. I met her and her mother in the anganwadi centre. We visited her house which was located at the most corner side. As we walked towards the house, the road became more narrow and more unhygienic, passing through many better houses and slowly reached few houses made of plastic rags and one of the houses was Sita's house which was located at the end of the lane, the condition of Sita house was more unexpected to see which was made with just sheets of plastics and plastic rags with many holes on it. The house was closely located nearby a big dumping garbage site, the site was unpleasant and a foul smell came from the site, there were also pigs inside the dumping site and it was also the site of open defecation for the people living nearby the area. Inside the house, there's a small single room with less utensils and no furniture to keep the utensils. The hygiene and cleanliness was lacking in the house environment and there was also a bad smell that came from the dumping site. There were plenty of flies and mosquitoes inside the house that could cause high chances of faeco-oral route illnesses.



All the social determinants of health were lacking which was like a big giant that obstruct the entire family towards achieving health. The condition of the house was not suitable for anyone to stay there, first the condition of the house which could lead to many diseases and second the location of the house itself.

Sita sister, Shuhi, a 3 year old, has a very cute face, she can neither speak nor walk, the anganwadi worker told that when she was young, she was severely malnourished exactly like the present situation of Sita. Evaluating such situation, severely malnutrition at the early age of a child have high risk that affecting physical and mentality growth of a child which could be temporary or even permanently. In Shuhi case, though there were many factors that her past history could also lead her to the present situation or it could be genetically but since myself as a lay person I could not detect or identify the correct reason.

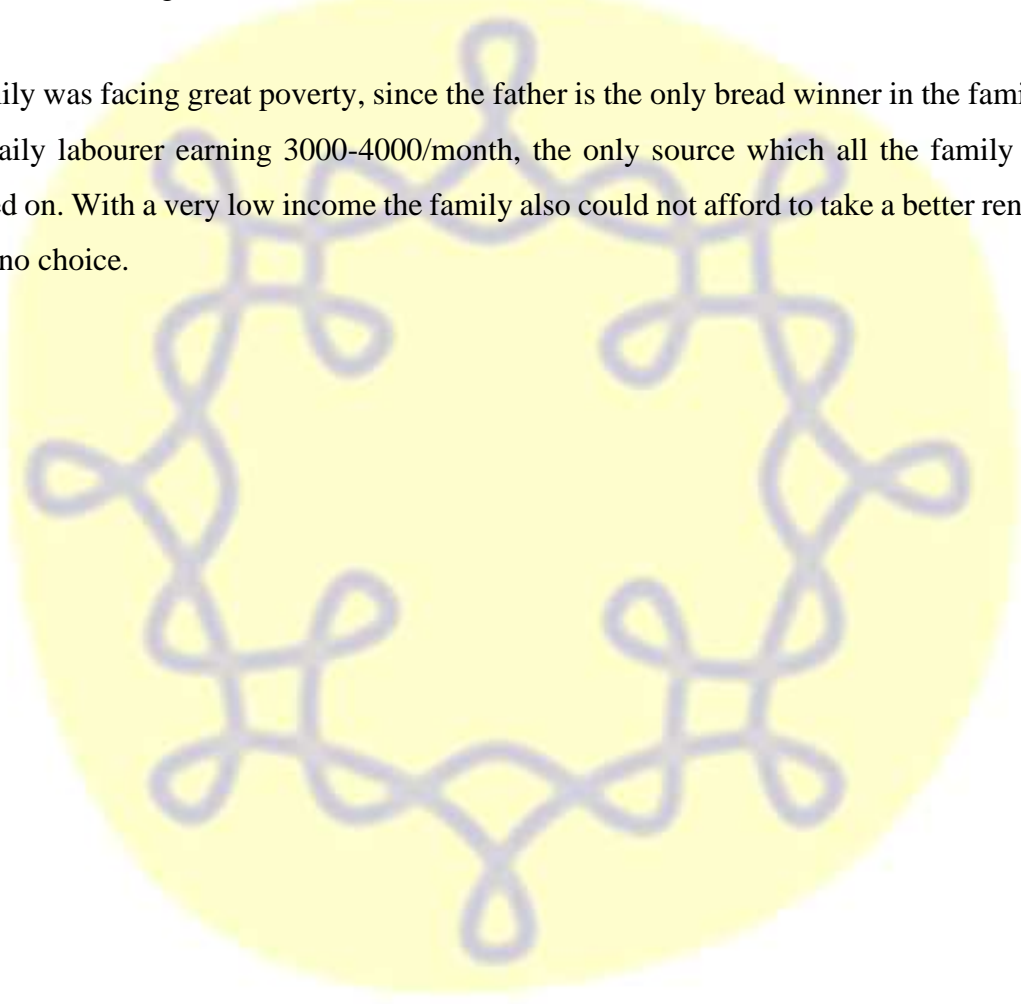
The responsibility to take care of the child should be shared by both the parents; I observed in Sita at her severe condition, the mother only was responsible for her care. When she needs to take her sick child to the hospital she needs to either asked permission or tell beforehand to the father. Like it happened when Parvati took Sita to the hospital for the 3<sup>rd</sup> follow-up for NRC and the father was very disappointed that she didn't tell him beforehand. Patriarchy attitude was still very much relevant in many families, where the women could not take any decisions without informing their husbands.

There were times I observed the mother was a bit stubborn and ignorant for taking care of her sick child, she was a bit careless and didn't listen to what the anganwadi and the ASHA was telling and directing her. Which before Sita she had also lost her own 7 months son who was severely malnourished and was sick at the same time, the brother who suffered from diarrhoea and also severely malnourished was taken medicine to a private clinic doctor and was not able to save him. Parvati had also finished operating vasectomy and didn't take proper care for Sita when she too had severe diarrhoea for 3 days, where on the previous day she went to the district hospital with ASHA for the NRC follow up, but she didn't inform the either the ASHA or the doctor about her daughter having diarrhoea.



There was a time, we found Shuhi sitting alone outside at the corner of her house where her mother went to anganwadi to get vaccination for Sita, at first we waited for Parvati at the house for 15 minutes, and we then went to search her in the nearby place where we found her at the anganwadi centre. Parvati responsibilities became double in taking care of both her daughters at the same time, where Shuhi could not walk. Though the mother could not carry both to the anganwadi, she should leave Shuhi to any care taker which she shouldn't leave alone. The environment itself was not safe; there is a high chance of child abuse in future in such situations.

The family was facing great poverty, since the father is the only bread winner in the family and he was a daily labourer earning 3000-4000/month, the only source which all the family members depended on. With a very low income the family also could not afford to take a better rented house but had no choice.



## Chapter-8

### Overall learning experiences

Working with the slum had given me the excitement and levels of frustration of the reality to see people in helpless conditions. Slum is a place that people did not choose to stay but were deprived by many circumstances.

The government had taken steps to help people by constructing multi storey buildings for the slum dwellers through the scheme JNNURM (Jawaharlal Nehru National Urban Renewal Mission) where the people need to pay rupees of 1,50,000. Few families had started shifting to the multi storey buildings; there was a big difference in their hygienic conditions before and after the shifting. There were few pockets of families who could not afford to pay for the multi storey buildings which they just waited for the government to displace them. The government approach was neither equitable nor affordable

- **Communication bridge**

Language gap, but with the help and commitment of the staff of CPHE, through their effort of translating and communicating there was an extensive learning from my field experiences that contributed to my knowledge and my personal learning.

- **Mother responsibilities**

Existence of nuclear family was very common; I observed the wife alone had to take all the roles and responsibilities alone in care taking and upbringing the children. The family entirely depends on her capacities and abilities in shaping it. In most families, at the family level, the role of the father was limited to providing financial support. Women were left alone in managing everything by themselves with their own capacities. A double burden was added more to the women who worked as domestic workers which made it more difficult in coping with the work inside and outside the house.

- **Proper care and attention equally needed**

Mother has a great role in child rearing; she has a main person who takes care of her children. In a patriarchal society she is expected to take care of her children as well as her

entire family. Many a times she is the only care giver for her children and has no help from her husband.

- **Education plays an important role**

Working with uneducated mothers added more difficulties regarding medicines, many times I found out they have no knowledge and would give wrong medicines and wrong dose to their sick child, and they could not identify the right medicines when kept with other different medicines. Here women played an important role in upbringing in childcare but there is a big mountain that blocks her if she could not read and write.

- **Importance of education**

Education is a powerful weapon that can change things. Comparing the mothers who had education with the mothers who did not have any education, I found out that the families conditions of the educated mothers were much better than the families of mothers with no education at all.

- **Prescription of iron tablets is ineffective**

Anaemia is one of the sickness that women suffered, though women got iron tablets either from the anganwadi or from any government health care, they hardly took it regularly though the tablets have to be taken daily on a specific duration. Women skipped iron tablets due to its side effects like nausea. Anaemia still remains a problem

- **Intersectoral collaboration**

The health system and other governmental approaches like the anganwadi centre and PHC/Civil Dispensary need to collaborate with each other and the community.

- ***NRC not the solution at the community level***

NRC is a government intervention in order to able to reduce the child mortality throughout the state and it focuses on treating and providing nutritional care, it provides nutritional therapeutic food for the child and also gives treatment for the sick children.

The therapeutic food given in the NRC was brought and packed by the government, the ingredients was unknown to the mothers, this made more difficult for them to get the exact recipe for their children after their discharged from NRC. The food in the NRC should be provided the food which would be available locally; there are many local food recipes that would help in improving the weight of the child which are affordable and accessible. Through which the child would not have to be readmitted to NRC.

According to the procedure of NRC there would be 14 days intervention, if the child doesn't reached to its normal weight within the targeted days, the child would be released and the child would continue to be malnourished. I had personally encountered 2 children who still remained severely malnourished after NRC.

NRC functioned as a floor mopper and when the child is released, the same child who was once a victim of being severely malnourished, would relapse back since the child had to go back home to the same environment and same conditions. In the NRC, the mother, being the care taker, had full time and concentration in taking care and to feed the child all the time, which usually at home she would also had other responsibilities or other works to do. Though NRC has also a good intentions which acts on the curative part, though to some extent is also very necessary but in the community health approach other strategies like the positive deviance could be apply, positive deviance is a home base or a community approach where the mothers of the nourished would share their experiences in child care and would also demonstrate the food practices to the mothers of the undernourished children.

There are so many other factors which are underlying underneath unsolved and that the NRC is not the solution to the poor people especially

- **Anganwadi the main source for the poor families**

Anganwadi centre played an important role in providing services and in detecting malnutrition and other medical and social problems by giving importance to food, nutrition and vaccination, and by giving counselling to the mothers about mother-child care, etc.

Supplementary food was provided for children under 5 years old. Families, who were economically poor, primarily depended on the food from anganwadi for their breakfast and lunch. Educational activities at the anganwadi acted as the only school for the children who had no formal education.

Though changes has taken place over a decades and after long years of providing supplementary food; the state still holds a high number of children of malnutrition in the country (42.8% of children under the age of 5 years, according to NFHS-4).

Every month many children from Indranagar and the nearby area were registered to NRC (Nutritional Rehabilitation Centre) which I personally encountered 4 children who were freshly admitted to NRC and many others were under the follow up of NRC. This scenario still indicates the poor condition of many children struggling to get a better and healthy living.

- **Malnutrition remains a struggle**

Though the supplementary food is provided at the anganwadi centre, severe malnutrition still remains in the pockets of the society, sometimes it remains hidden due to several reasons (I found out the number of severely malnourished exceeds the number which the anganwadi shared, by using the growth chart I found out the number of severely malnourished children were 12 but the anganwadi said there were only 3 severely malnourished children) and sometimes due to the unsuccessful services at the NRC.

Whatever the reasons may be, severe malnutrition will still remain a problem unless the social determinants of health are tackled first starting at the family level to community level to state level.

- **Multiple deliveries**

Due to poverty and unplanned pregnancies, it affects the child care process; all the children were not being looked after or taken proper care of by the mother since the mother has to



focus more on her little one. The rest of the children were left with less attention and less care which in the process affects the entire family.

- **Pregnancy after sterilisation**

Sterilisation is one of the methods of family planning used. The government has targets for sterilisation which the ANM has to meet, at the community level the ASHA and the anganwadi worker is made to meet the targets. There were two cases I encountered; women became pregnant after getting sterilised which also lead to unplanned pregnancy.

- **Food alone doesn't cure malnutrition**

After the intervention, I realised food alone doesn't eradicate malnutrition, there are other factor also need to be addressed like the social determinants that direct and indirectly affects health like safe drinking water, proper sanitation, proper housing, sufficient household income etc.

- **Children being left vulnerable**

I encountered, one 3 year old girl who couldn't walk was left alone outside the house near the garbage dumping site, she was all alone and the area around was quiet, in any such situations there might be a high chance of child abuse when no one is not around.

Later I found the mother was in the anganwadi centre getting immunisation for her 7 month old second child, since the mother was all alone to take care for her two children and couldn't handle to carry both her children.

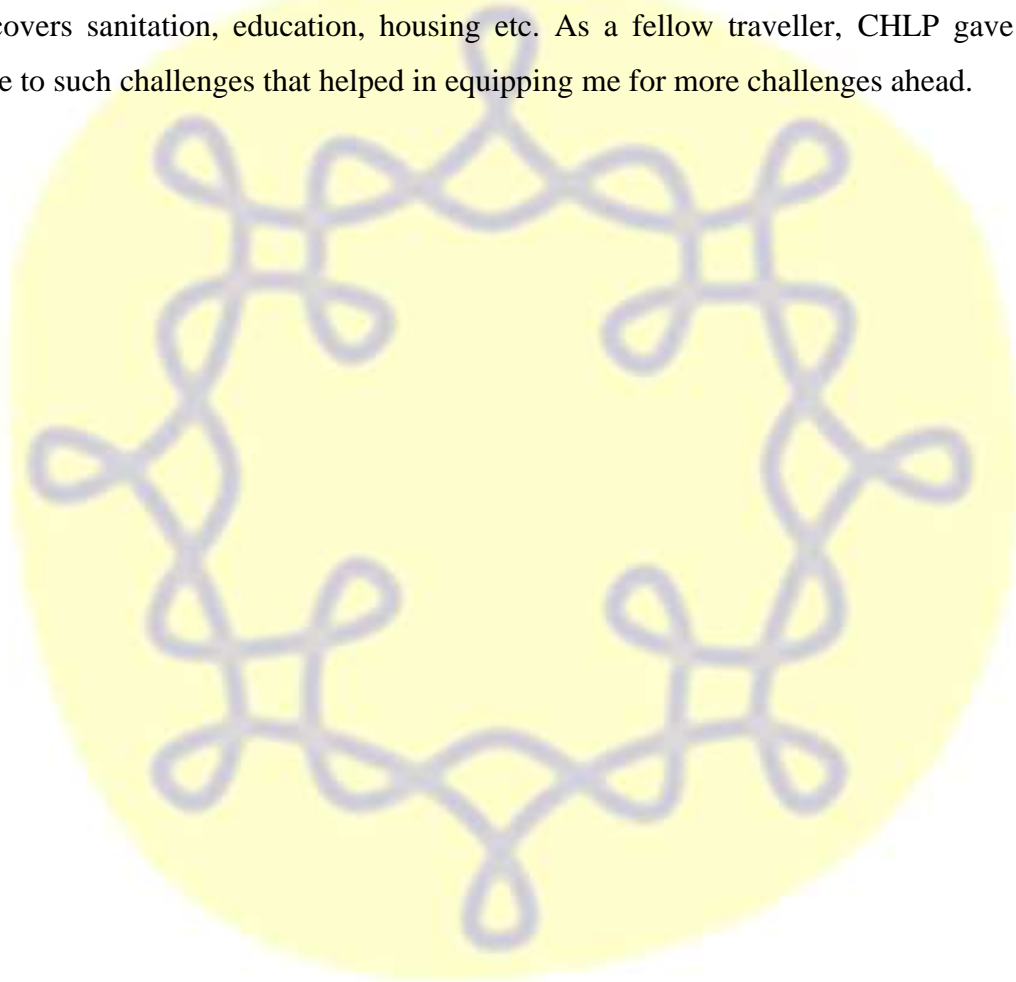
- **Poverty remains**

Poverty is one of the greatest barriers that affect poor people. Poverty is one of the factors that impact nutritional status.

Overall the community people face many problems in sanitation, space, gambling, garbage, drainage system, etc. Going there as a community health fellow, it's a very good exposure for

learning, though the situation that people face are not good to see. Looking through the community health lens, there are so many social health determinants that looks like the tip of an iceberg, which are still lacking and that are necessary to the people.

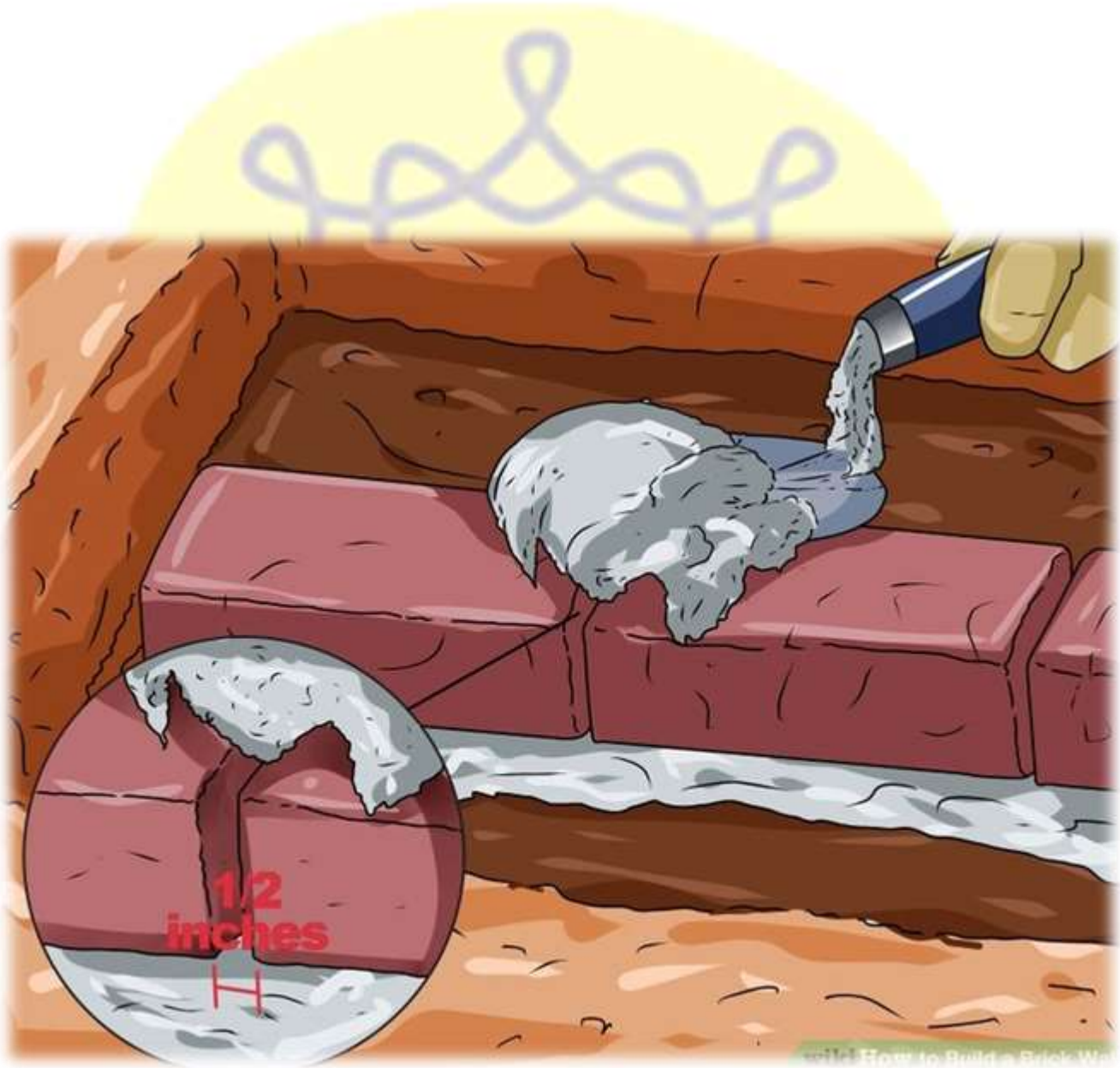
Community health approach is a slow process to see change in a community though it is possible to bring change. Comparing to the rural area, in slum areas, it is more difficult to get a community participation and involvement; it would take years to see change, since health is a broad area where health covers sanitation, education, housing etc. As a fellow traveller, CHLP gave me good exposure to such challenges that helped in equipping me for more challenges ahead.



# Chapter- 9

## Field Study

*Bricks in findings to bring change*



## **Proposed research title:**

A study on factors affecting the nutritional status of children 0-5 years of age in Indranagar, Bhopal, Madhya Pradesh

## **General objective:**

To understand the relationship between maternal knowledge and practice regarding nutrition, and the nutritional status of children between 0-5 years of age in Indranagar, Bhopal.

## **Specific Objectives:**

- To understand the literacy status of mothers of children aged 0-5 years
- To document the knowledge of mothers on child feeding practices
- To document the knowledge and practices of mothers on diarrhoea prevention and management
- To document the utilisation of anganwadi nutritional / health awareness services

## **Definitions and scope of study:**

- **Health Literacy:**  
“Has been defined as the cognitive and social skills which determine the motivation and ability of individuals to gain access to, understand and use information in ways which promote and maintain good health. (WHO Centre for Health Development, 2004)
- **Maternal health literacy:**  
“the cognitive and social skills that determine the motivation and ability of women to gain access to, understand, and use information in ways that promote and maintain their health and that of their children” (Renkert & Nutbeam, 2001)
- **Nutritional status of children:**  
“The nutritional status of a child is usually described in terms of anthropometry, i.e. body measurement, such as weight, in relation to age or height, which is reflective of the degree of underweight or wasting of that child.” (Ghouwa Ismail & Shahnaaz Suffla, 2003)

- *Malnutrition:*

“A broad term commonly used as an alternative to ‘undernutrition’, but which technically also refers to overnutrition. People are malnourished if their diet does not provide adequate nutrients for growth and maintenance or if they are unable to fully utilize the food they eat due to illness (undernutrition). They are also malnourished if they consume too many calories (overnutrition) (United Nations Children’s Fund” [UNICEF], 2012).
- *Infant and young child feeding (IYCF):*

“Term used to describe the feeding of infants (less than 12 months old) and young children (12–23 months old). IYCF programmes focus on the protection, promotion and support of exclusive breastfeeding for the first six months, on timely introduction of complementary feeding and on continued breastfeeding for two years or beyond” (UNICEF, 2012).
- *Diarrhoea prevention and management:*

“Loose stool which take the shape of container at frequency of 3 or more episodes in 24 hours.”
- *Anganwadi services through ICDS:*

“The Integrated Child Development Services (ICDS) scheme integrates several aspects of early childhood development and provides supplementary nutrition, immunisation, health check-ups, and referral services to children below six years of age as well as expecting and nursing mothers. Additionally, it offers non-formal pre-school education to children in the 3-6 age group, and health and nutrition education to women in the 15-45 age group” (Indian for Financial Management and Research, IFMR)

## **Background**



Nutrition as defined by the World Health Organisation (WHO) is “*the intake of food, considered in relation to the body’s dietary needs. Good nutrition – an adequate, well balanced diet combined with regular physical activity – is a cornerstone of good health. Poor nutrition can lead to reduced immunity, increased susceptibility to disease, impaired physical and mental development, and reduced productivity.*” (World Health Organisation [WHO], 2015)

Nutrition has a significant influence on growth and development, particularly during early childhood, which later impacts all aspects of health as overall physical, mental, emotional and social well being (WHO, 1946) throughout life (Ministry of Women and Child Development). Good nutrition can prevent or alleviate common diseases and their symptoms (Yeasmin, 2008).

Poor nutrition or malnutrition accounts for both undernutrition and overnutrition; and relates to deficiencies, excesses or imbalances in energy, protein and nutrient ingestion (Ministry of Women and Child Development).

#### ***Significance in Child Development:***

Malnutrition has significant negative impacts on child development and children are generally the first to show symptoms of non availability of food (Faraj, 2005). Malnutrition can result in high morbidity and mortality among young children owing to their lowered resistance to disease (Badrialaily, 2008). Furthermore, malnutrition has been found to affect brain development in children. Studies show that 70% of a child’s brain develops in utero while the remaining 30% is developed by the age of three (Singh, 2004). Increased nutritional requirements for growth and development leave children most vulnerable from conception to three years of age (Anonymous 2003). Malnutrition increases the risk of poor physical and cognitive growth, learning and educational outcomes (Mora, J. O., & Nestel, P. S., 2000, Faraj, 2005)

#### ***The Indian and Madhya Pradesh Context:***

Malnutrition is widespread in developing countries. India faces malnutrition as one of the most serious and large scale health problems. According to some facts about Indian children and their nutritional status presented by UNICEF and sourced from India’s National Family Health Survey (NFHS-3 2005-2006): India has the highest number of low birth weight babies per year at an

estimated 7.4 million; 20% of children under five years of age suffer from wasting due to acute undernutrition; 43% children under 5 years of age are underweight and 48% have stunting due to chronic undernutrition (UNICEF, Nutrition, NFHS-3-IN). According to NFHS-3, in Madhya Pradesh in particular, 58% of children under the age of 5 years are undernourished (State planning commission, 2012).

In relation to childhood malnutrition, improvement of nutrition in infants and young children, especially during the first two years of life, is imperative in reducing mortality. Furthermore, nutrition problems are closely related to over-all health problems, and are both closely linked to the environment of the home and community (Cameron. et al. 1983). Higher child malnutrition has been attributed to inadequate women's nutrition, feeding and caring practices for young children. These factors are closely related to women's social status, early marriage, low weight at pregnancy, multiple deliveries and their lower level of education (Saxena, anonyms ; UNICEF, Nutrition).

#### ***Infant and Child Feeding Practices:***

Appropriate feeding practices during infancy and childhood are essential for health and development (ref: Saha, Frongillo, Alam, Arifeen, Persson, and Rasmussen, 2008). Infant feeding practices include exclusive breastfeeding, the timely and appropriate introduction of complementary feeding to children around six completed months of age, and continued breastfeeding alongside other foods for children until two years of age and beyond. All these practices are essential. UNICEF quotes that only 20% of children age 6-23 months are fed appropriately according to all three recommended practices for infant and young child feeding (UNICEF, Nutrition).

Diseases related to nutrition usually have multiple causes which include poverty, food habits, infections, and lack of knowledge. Therefore addressing nutrition alone without other social determinants fails to prevent malnutrition (Cameron et al., 1983).

A survey on “comparison between the malnourished children and nourished children” had been conducted in Indranagar, Bhopal, by the researcher during the last field visit. Poverty and health

literacy were found to be among the major factors affecting the nutritional status of the children. Other direct and indirect social determinants that were highlighted included safe drinking water, sanitation, etc.

***Maternal Health Awareness:***

Poor maternal health prior to pregnancy (perinatal) contributes determining factors in pre and post natal child health (Mora et al., 2000). Short birth intervals are associated with higher levels of undernutrition (UNICEF, Nutrition). In addition, better nutrition and child survival have been shown to be related to higher maternal education (Mora et al., 2000). UNICEF also highlights that the percentage of children who are severely underweight is almost five times higher among children whose mothers have no education than among children whose mothers have 12 or more years of schooling (UNICEF, Nutrition). Maternal health literacy is therefore understood to play an important role in childhood malnutrition.

***Anganwadi Services:***

Anganwadi centres under the ICDS were introduced to provide educational and nutritional support for children up to 6 years of age. Services also extend to adolescent girls, pregnant and lactating mothers. UNICEF reports that only one third (33%) Indian children receive any service from an anganwadi centre; less than 25% receive supplementary foods through ICDS; and only 18% have their weights measured in an AWC (UNICEF, Nutrition).

Keeping the reported statistics and previous field observations in mind, the proposed aim of the study is to explore the relevance of maternal health awareness and other social determinants in childhood malnutrition.

## **Methodology**

### **Study Design**

The proposed research included a cross-sectional study that helped in identify and in understanding some of the factors affecting the nutritional status in children aged 0-5 years from among the slum-based population of Indranagar, Bhopal. The study was primarily utilising both the quantitative and qualitative methods. Data collection methods involved one to one survey interviews with 65 mothers, 2 in-depth interviews and 2 FGD (focus group discussion) using questionnaires to address educational status, socio-economic status, health awareness and social and cultural aspects impacting the nutritional status in children

### **Study population:**

The target population of this study will be the mothers of children from 0-5 years of age in Indranagar, PCnagar, Miranagar, Bhopal.

### **Sample size and sampling techniques:**

**Sample size:** The sample size will be 65 mothers for conducting survey, 2 in-depth interviews, and 2 FGD, malnutrition status will be identified through growth monitoring records from the respective anganwadis and verified by weighing the children during home visits.

### **Sampling technique:**

The study will be used stratified random sampling

### **Methods of Data collection:**

#### ***Data collection from the anganwadi:***

A list of children with growth monitoring status was obtained from the Anganwadi that helped in identifying the nourished and malnourished children within the respective slums. It was done using after obtaining appropriate permission for the same and confidentiality would be maintained throughout the study.

#### ***Data collection from the study population:***

*Schedule:* The study will have a schedule where data will be collected using a list of structured questions for survey and in-depth interview. Unstructured questions would be used for focus group discussion (FGD)

*Interview:* Quantitative and qualitative data will be collected for data collection

## **Inclusion**

Study population will include: Mothers of the malnourished children chosen for the study and mothers of the nourished children chosen for the study.

## **Ethical consideration**

### **Risks and Benefits**

The study does not include any immediate potential risks to the respondents.

The respondents will benefit from the research as findings of the study will be shared with them to provide them with an understanding of the factors affecting their children's nutritional status and overall health. Awareness about essential child feeding practices will be also shared with the respondents.

### **Consent**

Respondents would be requested for written consent after providing them the oral and written explanation of what the study entails, the respondent's role, confidentiality and the risks and benefits of the study in the form of the participant's information sheet and consent form as attached in the annexure B. These will also be translated into Hindi (language spoken by the community). The respondents will be informed of their right to withdraw from the study at any time they feel necessary.

### **Confidentiality**

- All participants in the study including the Anganwadi worker (AWW), translator (placement organisation) and researcher will be required to sign a confidentiality statement in agreement to protecting the identity of all respondents and their children included in the

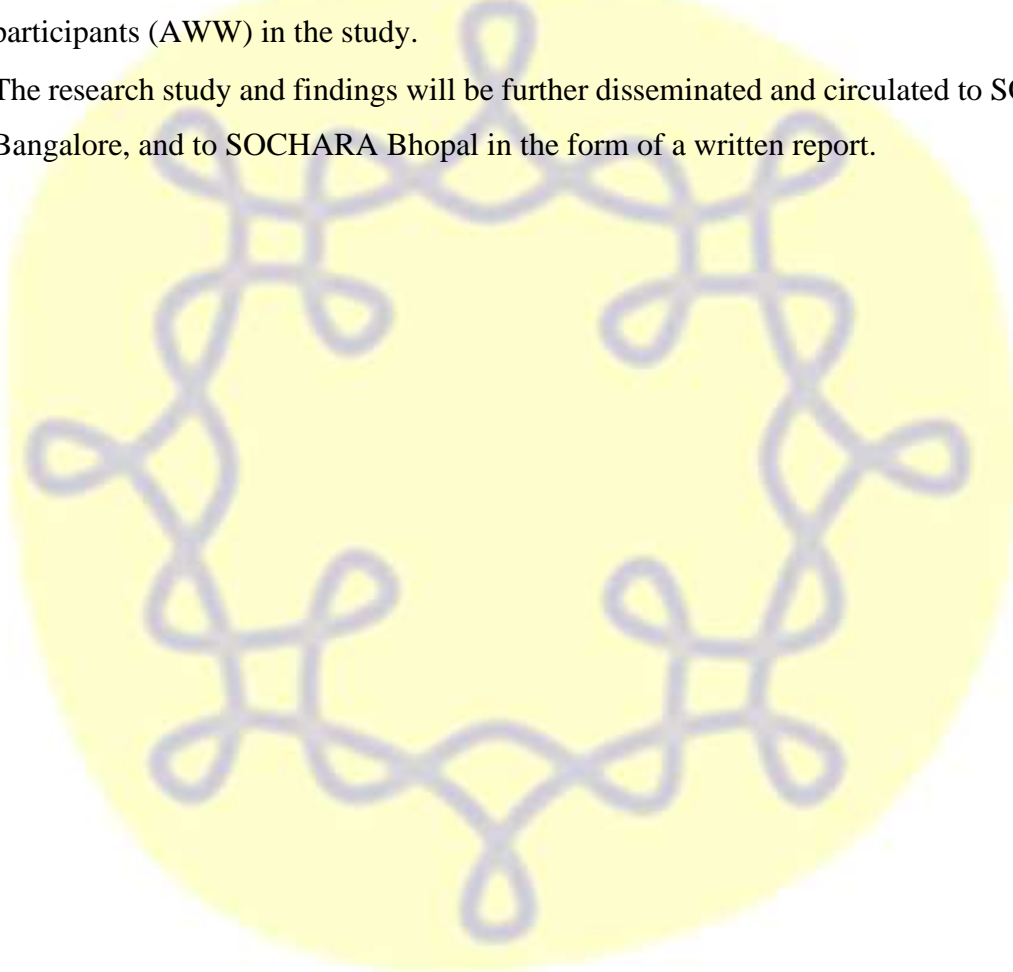


study. The confidentiality statement is attached in Annexure B (Will also be translated into Hindi).

- All respondent-identifiable information will be made anonymous when sharing the findings of the study.

### **Dissemination**

- The research findings will be translated and shared with the respondents and other participants (AWW) in the study.
- The research study and findings will be further disseminated and circulated to SOCHARA Bangalore, and to SOCHARA Bhopal in the form of a written report.



## Results

The study was conducted in Indranagar, Bhopal, Madhya Pradesh, 24 respondents participated during the survey through questionnaire, the data collection was taken during the month of October and November, 2015.

The results from the study were:

**Table 1:** Educational status of the mothers

Mothers education status	Frequency	Percent
Literate	6	25.00%
Illiterate	18	75.00%
Total	24	100.00%

In the data collected, 6 (25%) mothers were literate who had formal education and there were 18 (75%) mothers who were illiterate i.e. who had no formal education.

**Table 2:** Nutritional status of the children surveyed

Nutritional status	Frequency	Percent
Green	11	45.83%
Yellow	9	37.50%
Red	4	16.67%
Total	24	100.00%

According to the data collected, 11 (45.83%) of the children were normal or nourished which indicated in green colour, where the other two colours that includes under malnourished i.e. The yellow and red were 9 (37.50%) and 4 (16.67%).

Type of family	Frequency	Percent
Nuclear	15	62.50%
Joint	9	37.50%
Total	24	100.00%

According to the table, 15 (62.50%) of the respondents lived in a nuclear family, whereas the rest of the respondents lived in a joint family.

**Table 3:** Types of houses surveyed

Type of house	Frequency	Percent
<b>Kutcha</b>	11	45.83%
<b>Semi kutcha</b>	12	50.00%
<b>Pucca</b>	1	4.17%
<b>Total</b>	24	100.00%

According to the table, half of the respondents lived in a semi kutcha houses i.e. 12 (50%) whereas only one family of the respondents lived in a pucca house which had just sifted to the multi storey buildings

**Table 4:** Years of resettlement of the respondents

Years of resettlement	Frequency	Percent
<b>Less than one year</b>	1	4.17%
<b>1 to 5</b>	1	4.17%
<b>6 to 10</b>	5	20.83%
<b>11 to 20</b>	5	20.83%
<b>Entire life</b>	12	50.00%
<b>Total</b>	24	100.00%

According to the table, half of the respondents i.e. 12 (50%) have been staying in the same area for their entire life whereas the rest of the respondents have stayed in the slum area

**Table 5:** Respondents social category

Social category	Frequency	Percent
<b>Schedule caste</b>	14	58.33%
<b>Schedule tribe</b>	3	12.50%

<b>Other backward caste</b>	6	25.00%
<b>Other caste</b>	1	4.17%
<b>Total</b>	24	100.00%

According to the table, more than half of the respondents i.e. 14 (58.33%) belonged to schedule caste and the rest of the respondents belonged to the other social categories follows by OBC with 6 (25%).

**Table 6:** Husband occupation

<b>Husband occupation</b>	<b>Frequency</b>	<b>Percent</b>
<b>Self employed</b>	4	16.67%
<b>Daily wage</b>	9	37.50%
<b>Seasonal wage</b>	4	16.67%
<b>Monthly wage</b>	7	29.17%
<b>Total</b>	24	100.00%

According to the table, 9 (37.50%) of the husbands of the respondents worked as daily wagers, 7 (29.17%) gets monthly wages and whereas the rest earned as daily wages and seasonal wages.

**Table 7:** Mothers occupation

<b>Mothers occupation</b>	<b>Frequency</b>	<b>Percent</b>
<b>Home maker</b>	13	54.17%
<b>Domestic worker</b>	11	45.83%
<b>Total</b>	24	100.00%

According to the table, 13 (54.17%) of the mothers were home makers and the rest were domestic workers.

**Table 8:** Household economic category

<b>Economic category</b>	<b>Frequency</b>	<b>Percent</b>
<b>Below poverty line (BPL)</b>	2	8.33%

<b>Above poverty line (APL)</b>	10	41.67%
<b>Antodaya</b>	3	12.50%
<b>Not available</b>	9	37.50%
<b>Total</b>	24	100.00%

According to the table, the economic status of the respondents were mostly APL with 10 (41.67%) and the rest of the respondents were antodaya with just 3 (12.5%) and BPL with just 2 (8.33%) and there were 9 respondents did not have any type of card due to recent separating to a nuclear family.

**Table 9:** Total number of children

<b>Total child</b>	<b>Frequency</b>	<b>Percent</b>
<b>1</b>	7	29.17%
<b>2</b>	7	29.17%
<b>3</b>	5	20.83%
<b>4</b>	4	16.67%
<b>6</b>	1	4.17%
<b>Total</b>	24	100.00%

According to the table, many mothers had few children where 7 mothers had 1 child and another 7 mothers had 2 children and there was a mother who had 6 children.

**Table 10:** Type of cooking fuel used by the respondents

<b>Type of cooking fuel</b>	<b>Frequency</b>	<b>Percent</b>
<b>Firewood</b>	5	20.83%
<b>LPG</b>	19	79.17%
<b>Total</b>	24	100.00%

According to the table, there were still families who depend on the firewood for cooking with 5 (20.83%) whereas the rest depend on LPG gas.

**Table 11:** Separate kitchen availability



<b>Separate kitchen</b>	<b>Frequency</b>	<b>Percent</b>
<b>Yes</b>	4	16.67%
<b>No</b>	20	83.33%
<b>Total</b>	24	100.00%

According to the table, there were many families who did not have any separate kitchen with 20 (83.33%) and only 4 (16.67%) of the families had separate kitchen who lives in newly constructed multi storey buildings.

**Table 12:** Present and used toilets by the respondents

<b>Present and use toilet</b>	<b>Frequency</b>	<b>Percent</b>
<b>Yes</b>	13	54.17%
<b>No</b>	11	45.83%
<b>Total</b>	24	100.00%

According to the table, 13 (54.17%) of the families have separate and usable toilet whereas the rest still depend on open defecation.

**Table 13:** Source of drinking water

<b>Main source of water in the household</b>	<b>Frequency</b>	<b>Percent</b>
<b>Receive public water</b>	24	100.00%
<b>Total</b>	24	100.00%

According to the table, all the families receive public water from the government tank trucks which comes 2-3 times in a week.

**Table 14:** Mothers attended all the ante natal checkups

<b>Attended all the 4 ante natal check-up</b>	<b>Frequency</b>	<b>Percent</b>
<b>Yes</b>	22	91.67%
<b>No</b>	2	8.33%
<b>Total</b>	24	100.00%

According to the table, 2 (8.33%) mothers did not complete all the main 4 ante natal check up during pregnancy whereas the rest completed all the antenatal checkups.

**Table 15:** Colostrum fed to the child

Colostrum fed	Frequency	Percent
Yes	20	83.33%
No	4	16.67%
<b>Total</b>	24	100.00%

According to the table, 20 (83.33%) children were fed colostrums.

**Table 16:** During lactating, received supplementary food from anganwadi centre

Received supplementary food from anganwadi during lactating period	Frequency	Percent
Yes	24	100.00%
<b>Total</b>	24	100.00%

According to the table, all the mothers received supplementary food from the anganwadi centres during lactating period.

**Table 17:** Place of child delivery

Where was the child born	Frequency	Percent
Government hospital	15	62.50%
Private hospital	2	8.33%
Home delivery	7	29.17%
<b>Total</b>	24	100.00%

According to the table, 15 (62.50%) mothers delivered their children in the government hospital and 7 (29.17%) mothers had their delivery at home.

**Table 18:** Children immunisation

<b>Fully immunised</b>	<b>Frequency</b>	<b>Percent</b>
Yes	24	100.00%
<b>Total</b>	<b>24</b>	<b>100.00%</b>

According to the table, all 24 children were fully immunised.

**Table 19:** Disposal of faeces

<b>Throw faeces</b>	<b>Frequency</b>	<b>Percent</b>
Dropped into toilet latrine	8	33.33%
Rinse/washed away in open area	3	12.50%
Rinsed/washed away in drainage system	1	4.17%
Disposed somewhere in the dumping garbage	9	37.50%
Use toilet	3	12.50%
<b>Total</b>	<b>24</b>	<b>100.00%</b>

According to the table, 9 (37.50%) mothers throw the faeces of their child in the dumping garbage, where 9 (37.50%) disposed somewhere in the dumping garbage.

**Table 20:** Washing hands before feeding

<b>Wash hand before feeding</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cum. Percent</b>
Yes	19	79.17%	79.17%
Sometimes	5	20.83%	100.00%
<b>Total</b>	<b>24</b>	<b>100.00%</b>	<b>100.00%</b>

According to the table, 19 (79.17%) mothers washed their hands before feeding their child

**Table 21:** Washing hands after used of latrine

<b>Wash after use of latrine</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cum. Percent</b>
----------------------------------	------------------	----------------	---------------------

<b>Yes</b>	18	75.00%	75.00%
<b>Sometimes</b>	6	25.00%	100.00%
<b>Total</b>	24	100.00%	100.00%

According to the table, 18 (75%) mothers wash hands after used of latrines

**Table 22:** Breastfed less than 6 months

<b>Stopped breastfeeding less than 6 months</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cum. Percent</b>
<b>Yes</b>	8	33.33%	33.33%
<b>No</b>	16	66.67%	100.00%
<b>Total</b>	24	100.00%	100.00%

According to the table, 8 (33.33%) children were not breastfed less than 6 months

**Table 23:** Breastfed more than 7 months

<b>Stopped breastfeeding after 7 months 2 years</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cum. Percent</b>
<b>No</b>	14	66.67%	66.67%
<b>Yes</b>	7	33.33%	100.00%
<b>Total</b>	21	100.00%	100.00%

According to the table, 7 (33.33%) children were not breastfed after 7 months

**Table 24:** Exclusive breastfeeding given

<b>Exclusive breastfeeding given</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cum. Percent</b>
<b>Less than 1 month</b>	3	12.50%	12.50%
<b>2-3 months</b>	2	8.33%	20.83%
<b>4-6 months</b>	14	58.33%	79.17%
<b>More than 6 months</b>	5	20.83%	100.00%
<b>Total</b>	24	100.00%	100.00%

According to the table, 19 children were not exclusively breastfed

**Table 25:** Introduction of weaning

<b>Introduction of weaning</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cum. Percent</b>
<b>Less than 6 months</b>	7	29.17%	29.17%
<b>More than 6 months</b>	17	70.83%	100.00%
<b>Total</b>	24	100.00%	100.00%

According to the table, 7 children weaning was given less than 6 months

**Table 26:** Frequency of food duration

<b>Meals given in a day</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cum. Percent</b>
<b>3 times</b>	5	20.83%	20.83%
<b>4 times</b>	15	62.50%	83.33%
<b>More than 5 times</b>	4	16.67%	100.00%
<b>Total</b>	24	100.00%	100.00%

According to the table, 5 children were given food 3 times in a day and 15 children were given 4 times and 4 children were given more than 5 times

**Table 27:** Mothers knowledge on nutritious food

<b>Information of nutritious food</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cum. Percent</b>
<b>Yes</b>	17	70.83%	70.83%
<b>No</b>	7	29.17%	100.00%
<b>Total</b>	24	100.00%	100.00%

According to the table, 17 mothers have basic knowledge on nutritious food

**Table 28:** Mothers knowledge on the cause of diaahoea

<b>Has knowledge about the cause of diarrhoea</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cum. Percent</b>
<b>Yes</b>	9	37.50%	37.50%
<b>A little bit</b>	5	20.83%	58.33%
<b>No</b>	6	25.00%	83.33%



<b>Teething</b>	4	16.67%	100.00%
<b>Total</b>	24	100.00%	100.00%

According to the table, 9 mothers had basic information on the causes of diarrhoea, and 5 mothers had a little knowledge, 6 mothers had no knowledge on the cause of diarrhoea and 4 mothers said diarrhoea is caused due to teething

**Table 29:** Uses of ORS during diarrhoea

Use ors during diarrhoea	Frequency	Percent	Cum. Percent
<b>No</b>	4	16.67%	16.67%
<b>Yes</b>	20	83.33%	100.00%
<b>Total</b>	24	100.00%	100.00%

According to the table, 20 mothers gave ors when their child felt sick

**Table 30:** Children under 5 years receive food from the anganwadi centre

Receive food from anganwadi centre	Frequency	Percent	Cum. Percent
<b>Regularly</b>	19	79.17%	79.17%
<b>Irregular</b>	1	4.17%	83.33%
<b>Never receive</b>	4	16.67%	100.00%
<b>Total</b>	24	100.00%	100.00%

According to the table, 19 mothers received food from the anganwadi centre

**Table 30:** Children under 5 years receive medicines from the anganwadi centre

Receive medicines from anganwadi centre	Frequency	Percent	Cum. Percent
Regularly	18	75.00%	75.00%
Irregular	5	20.83%	95.83%
Never receive	1	4.17%	100.00%
<b>Total</b>	24	100.00%	100.00%

According to the table, 18 mothers regularly received medicines from the anganwadi centre

**Table 31:** Mothers gets support from the anganwadi worker

<b>Get anganwadi support</b>	<b>No</b>	<b>Yes</b>
Diarrhoea	9	15
Breastfeeding	6	18
Healthy eating	5	19
Hand washing	10	14
Complementary feeding	9	15
Growth chart	12	12
Hygiene	8	16
De worm	7	17
Malnutrition	10	14
Junk food	14	10

According to the table above, out of 24 mothers, 14 of the mothers gets less awareness on the impacts of junk food, 12 mothers gets less support in awareness from the anganwadi centre on growth chart of weight to age. Many of the mothers, 14 out of 24 mothers gets awareness on how to feed the child with nutritious food.

**Table 32:** Method of feeding

<b>How do you feed the child</b>	<b>Yes</b>	<b>No</b>
Hand	15	9
Bottle	2	22
Cup	0	24
Spoon	3	21
Self	10	14

According to the table, out of 24, 15 mothers fed their children with hand and 10 children ate by themselves.

**Table 33:** Suffers from any sickness for the last 1 year

<b>Suffering for the last 1 year</b>	<b>No</b>	<b>Yes</b>
--------------------------------------	-----------	------------

Fever	6	18
Diarrhea	15	9
Rashes	20	4
Common cold	9	15
Cough	13	11
Difficult in breading	24	0
Malaria	24	0
Vomit	19	5
Worm infestation	21	3
Pneumonia	23	1

According to the table, 18 out of 24 children had suffered fever in the last one year, 9 children suffered diarrhoea.

**Table 34:** Comparison of the mother’s education status with their children nutritional status

Mothers education status	Nutritional status			Total
	Green	Red	Yellow	
Literate	3	0	3	6
Row%	50.00%	0.00%	50.00%	100.00%
Illiterate	8	4	6	18
Row%	44.44%	22.22%	33.33%	100.00%
<b>Total</b>	11	4	9	24
Row%	45.83%	16.67%	37.50%	100.00%

In the table it shows literate mothers doesn’t have any severely malnourished children and also illiterate mothers have nourished children with 44.44 %.

**Table 35:** Comparison of the mother’s education status with their children which colostrums were fed

Mothers education status	Colostrums fed		Total
	Colostrums fed	Does not fed colostrums	
Literate	6	0	6
Row%	100.00%	0.00%	100.00%

<b>Illiterate</b>	14	4	18
Row%	77.78%	22.22%	100.00%
<b>Total</b>	20	4	24
Row%	83.33%	16.67%	100.00%

In this table, there are many factors that led the children not to drink the colostrums that were encountered, 4 children of the mothers who are illiterate colostrums were not fed

**Table 36:** Comparison of the children nutritional status with children whom colostrums were fed

	<b>Colostrums fed</b>		
<b>Nutritional status</b>	<b>Colostrums fed</b>	<b>Does not fed colostrums</b>	<b>Total</b>
<b>Green</b>	9	2	11
Row%	81.82%	18.18%	100.00%
Col%	45.00%	50.00%	45.83%
<b>Yellow</b>	8	1	9
Row%	88.89%	11.11%	100.00%
Col%	40.00%	25.00%	37.50%
<b>Red</b>	3	1	4
Row%	75.00%	25.00%	100.00%
Col%	15.00%	25.00%	16.67%
<b>Total</b>	20	4	24
Row%	83.33%	16.67%	100.00%
Col%	100.00%	100.00%	100.00%

According to the table, 20 (83.33%) children were fed colostrums and their present nutritional status were 9 nourished children, 8 moderate children and 3 severely malnourished children whereas there were 4 children that colostrum was not being fed.

**Table 37:** Comparison of the mother's education status with the children where exclusive breastfeeding given

	<b>Exclusive breastfeeding given</b>	
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<b>Mothers education status</b>	Less than 1 month	Less than 3 months	4-6 months	More than 6 months	<b>Total</b>
<b>Literate</b>	0	0	4	2	<b>6</b>
Percentage	0.00%	0.00%	66.67%	33.33%	<b>100.00%</b>
<b>Illiterate</b>	3	2	10	3	<b>18</b>
Percentage	16.67%	11.11%	55.56%	16.67%	<b>100.00%</b>
<b>Total</b>	3	2	14	5	<b>24</b>
Percentage	12.50%	8.33%	58.33%	20.83%	<b>100.00%</b>

According to the table, from the total number of 24 children, the numbers of the children of the literate mothers who receive 4 to 6 months of exclusive breastfeeding were 4 (66.67%) and 2 (33.33%) of the children of the literate mothers receive exclusive breastfeeding till they reach more than 6 months.

The numbers of the children of the illiterate mothers who does not receive exclusive breastfeeding or in less than 1 month were 3 in number (16.67%), 2 (11.11%) children of the illiterate mothers receive exclusive breastfeeding till they attain 3 months, 10 (55.56%) the children of the illiterate mothers receive exclusive breastfeeding when they attained 4 to 6 months exclusive breastfeeding and 3 (16.67%) children of the literate mothers receive exclusive breastfeeding till they reach more than 6 months.

**Table 38:** Comparison of the mother's education status with the mothers knowledge on the cause of diarrhoea

<b>Mothers education status</b>	<b>Has knowledge about the cause of diarrhoea</b>				<b>Total</b>
	<b>Has knowledge</b>	<b>Has a little knowledge</b>	<b>Does not have any knowledge</b>	<b>Due to tooth</b>	
<b>Literate</b>	4	0	1	1	6
Row%	66.67%	0.00%	16.67%	16.67%	100.00%
Col%	44.44%	0.00%	16.67%	25.00%	25.00%
<b>Illiterate</b>	5	5	5	3	18
Row%	27.78%	27.78%	27.78%	16.67%	100.00%
Col%	55.56%	100.00%	83.33%	75.00%	75.00%



<b>Total</b>	9	5	6	4	24
Row%	37.50%	20.83%	25.00%	16.67%	100.00%
Col%	100.00%	100.00%	100.00%	100.00%	100.00%

According to the table, 9 (37.50%) had knowledge on the cause of diarrhoea where 4 literate mothers had the knowledge about the cause of diarrhoea, and 5 (27.78%) illiterate mothers has knowledge about the cause of diarrhoea.

5 (20.83%) mothers had a little knowledge on the factors causing diarrhoea, where 5 (20.83%) illiterate mothers had a little knowledge on the factors causing diarrhoea.

6 (25%) did not have any knowledge on the cause of diarrhoea which constitute 1(16.67%) literate mother and 5 (27.78%) illiterate mothers and there were 4 mothers took diarrhoea due to tooth growth which constitute 1 (16.67%) and 3 illiterate mothers.

**Table 39:** Comparison of the mother's education status with hand washing before feeding

<b>Mothers education status</b>	<b>Wash hand before feeding</b>		<b>Total</b>
	<b>Does hand washing</b>	<b>Sometimes does hand washing</b>	
<b>Literate</b>	6	0	6
Row%	100.00%	0.00%	100.00%
Col%	31.58%	0.00%	25.00%
<b>Illiterate</b>	13	5	18
Row%	72.22%	27.78%	100.00%
Col%	68.42%	100.00%	75.00%
<b>Total</b>	19	5	24
Row%	79.17%	20.83%	100.00%
Col%	100.00%	100.00%	100.00%

According to the table, 19 (79.17%) mothers washed hands before feeding their children which includes 6 literate mothers and 13 illiterate mothers, and 5 (20.83%) illiterate mothers sometimes washed hands before feeding their children.

**Table 40:** Comparison of the mother's education status with hand washing after latrine used

	Wash hands after use of latrine		
Mothers education status	Yes	Sometimes	Total
Literate	6	0	6
Row%	100.00%	0.00%	100.00%
Col%	33.33%	0.00%	25.00%
Illiterate	12	6	18
Row%	66.67%	33.33%	100.00%
Col%	66.67%	100.00%	75.00%
<b>Total</b>	18	6	24
Row%	75.00%	25.00%	100.00%
Col%	100.00%	100.00%	100.00%

According to the table, 18 (75%) mothers washed hands after the use of latrine with 6 literate mothers and 12 illiterate mothers, whereas 6 illiterate mothers sometimes washed their hands right after using of latrines.

**Table 41:** Comparison of the mother's education status with disposal of faeces

Mothers education status	Throw faeces					Total
	Dropped into toilet latrine	Rinse/washed away in open area	Rinsed/washed away in drainage system	Disposed somewhere in garbage	Use toilet	
Literate	4	0	0	1	1	6
Row%	66.67%	0.00%	0.00%	16.67%	16.67%	100.00%
Col%	50.00%	0.00%	0.00%	11.11%	33.33%	25.00%
Illiterate	4	3	1	8	2	18
Row%	22.22%	16.67%	5.56%	44.44%	11.11%	100.00%
Col%	50.00%	100.00%	100.00%	88.89%	66.67%	75.00%
<b>Total</b>	8	3	1	9	3	24
Row%	33.33%	12.50%	4.17%	37.50%	12.50%	100.00%
Col%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

According to the table, 8 (33.33%) mothers throw the faeces in the toilet latrine which included 4 literate mothers and 4 illiterate mothers. 3 (12.5%) mothers rinse or wash away the faeces in an open area and 9 (37.5%) mothers disposed the faeces in the garbage which includes 8 illiterate mothers and 1 literate mother.

**Table 42:** Comparison of the mother’s occupation with children nutritional status

Mothers occupation	Nutritional status			Total
	Green	Yellow	Red	
<b>Home maker</b>	5	5	3	13
Row%	38.46%	38.46%	23.08%	100.00%
Col%	45.45%	55.56%	75.00%	54.17%
<b>Domestic worker</b>	6	4	1	11
Row%	54.55%	36.36%	9.09%	100.00%
Col%	54.55%	44.44%	25.00%	45.83%
<b>Total</b>	11	9	4	24
Row%	45.83%	37.50%	16.67%	100.00%
Col%	100.00%	100.00%	100.00%	100.00%

According to the table, 11 (45.83%) were nourished children where 6 mothers worked as domestic workers and 5 mothers were home makers whereas 4 (16.67%) children were severely nourished where 3 mothers were home makers and 1 was working as domestic worker.

**Table 43:** Comparison of the mother’s education status with mothers knowledge on nutritious food

Mothers education status	Information of nutritious food		Total
	Yes	No	
<b>Literate</b>	5	1	6
Row%	83.33%	16.67%	100.00%
Col%	29.41%	14.29%	25.00%
<b>Illiterate</b>	12	6	18

Row%	66.67%	33.33%	100.00%
Col%	70.59%	85.71%	75.00%
<b>Total</b>	17	7	24
Row%	70.83%	29.17%	100.00%
Col%	100.00%	100.00%	100.00%

According to the table, 17 (70.83%) mothers had basic information on the nutritious food which includes 5 literate and 12 illiterate mothers and the rest of 7 (29.17%) mothers did not have basic knowledge on nutritious food.

**Table 44:** Comparison of the children nutritional status with mothers basic information on nutritious food

	<b>Mothers basic information on nutritious food</b>		
<b>Nutritional status</b>	<b>Yes</b>	<b>No</b>	<b>Total</b>
<b>Green</b>	7	4	11
Row%	63.64%	36.36%	100.00%
Col%	41.18%	57.14%	45.83%
<b>Yellow</b>	8	1	9
Row%	88.89%	11.11%	100.00%
Col%	47.06%	14.29%	37.50%
<b>Red</b>	2	2	4
Row%	50.00%	50.00%	100.00%
Col%	11.76%	28.57%	16.67%
<b>Total</b>	17	7	24
Row%	70.83%	29.17%	100.00%
Col%	100.00%	100.00%	100.00%

According to the table, 17 (70.83%) mothers had basic information on nutritious food which the children nutritional status includes 8 moderate 7 nourished and 2 red and there were 7 (29.17%) mothers who did not have any basic information on nutritious food.

**Table 45:** Comparison of the mother's education status with awareness received on malnutrition

<b>Mothers education status</b>	<b>Receive awareness on malnutrition</b>		<b>Total</b>
	<b>No</b>	<b>Yes</b>	
<b>Literate</b>	2	4	6
Row%	33.33%	66.67%	100.00%
Col%	22.22%	28.57%	26.09%
<b>Illiterate</b>	7	10	17
Row%	41.18%	58.82%	100.00%
Col%	77.78%	71.43%	73.91%
<b>Total</b>	9	14	23
Row%	39.13%	60.87%	100.00%
Col%	100.00%	100.00%	100.00%

According to the table, there were 14 (60.87%) mothers who received awareness from the anganwadi worker where 4 were literate and 10 were not illiterate.

**Table 46:** Comparison of the children nutritional status with the awareness received on malnutrition

<b>Nutritional status</b>	<b>Receive awareness on malnutrition</b>		<b>Total</b>
	<b>No</b>	<b>Yes</b>	
<b>Green</b>	6	5	11
Row%	54.55%	45.45%	100.00%
Col%	66.67%	35.71%	47.83%
<b>Yellow</b>	2	6	8
Row%	25.00%	75.00%	100.00%
Col%	22.22%	42.86%	34.78%
<b>Red</b>	2	3	5
Row%	25.00%	75.00%	100.00%
Col%	11.11%	21.43%	17.39%



<b>Total</b>	10	14	24
Row%	39.13%	60.87%	100.00%
Col%	100.00%	100.00%	100.00%

According to the table, 14 (60.87%) mothers received awareness from the anganwadi worker which includes the nutritional status of the children where 5 were nourished, 6 were moderate and 3 were severely malnourished whereas 9 mothers did not receive any awareness from the anganwadi worker regarding malnutrition.

**Table 46:** Comparison of the children nutritional status with the frequency of food given

	Meals given in a day			
<b>Nutritional status</b>	<b>3</b>	<b>4</b>	<b>&lt;5</b>	<b>Total</b>
<b>Green</b>	1	9	1	11
Row%	9.09%	81.82%	9.09%	100.00%
Col%	20.00%	60.00%	25.00%	45.83%
<b>Yellow</b>	2	4	3	9
Row%	22.22%	44.44%	33.33%	100.00%
Col%	40.00%	26.67%	75.00%	37.50%
<b>Red</b>	2	2	0	4
Row%	50.00%	50.00%	0.00%	100.00%
Col%	40.00%	13.33%	0.00%	16.67%
<b>Total</b>	5	15	4	24
Row%	20.83%	62.50%	16.67%	100.00%
Col%	100.00%	100.00%	100.00%	100.00%

According to the table, 9 (81.82%) children who were being fed 4 times in a day were more nourished.

## **Discussions:**

This study was conducted to find out the different possible factors that affects the nutritional status of the children (0-5 years old) in Indranagar, Bhopal, Madhya Pradesh. A cross section study was conducted. The main purpose of this study was to understand the relationship between maternal knowledge and practice and the nutritional status of children. This study was quantitative study using a structured questionnaire. According to the study, 65 respondents needed to be covered which would include the mixed method i.e., quantitative and qualitative which would cover the survey, in-depth interview and focus group discussion. The study did not go according to the plan, due to various reasons where qualitative study was not able to cover. Unavailability of anganwadi worker for several days, shifting of people to their new house where it was difficult to track them, it was during festive season the study had to be paused for a while, language also added more burden which made more difficult.

In Bhopal, the female literacy is 76.5 (Census 2011), but in Indranagar many women or mothers were still illiterate, education impacts the nutritional status in a child to some extent. The literacy rate of the mothers were 6 (25%) and 3 of them had normal nourished children whereas the illiterate mothers were 18 (75%) and their children were undernourished. But when it comes to nutritional knowledge, the illiterate mothers had basic information on nutritious food.

In the findings, almost half of the respondents were housewives and half were working as domestic workers, few mothers who were working have less time to spend with their children, but the data I collected showed that mothers who work as domestic workers had nourished children.

There were 11 (45.83%) nourished children and 13 undernourished children, according to the data collected the average frequency of food intake was 4 times daily of the children. Though the frequency of food given were given at an average of 4 times but there were still many children who were undernourished, we could see that there were also many other factors contributing to the nutritional status of the children which food alone doesn't cause or eradicate malnutrition, there are also other social determinants that contributes to the nutritional status of the children like having a clean environment, safe drinking water etc

All the literate mothers fed colostrums to their children, whereas 4 mothers who were not educated did not feed colostrums to their children. There were multiple factor that they were not able to fed colostrums, one mother did not have breast milk, one child was too sick that he did not drink breast milk and the two children were the mothers were ignorant to fed colostrums.

Colostrum is not the only factor contributing to the nutritional status where there were 2 nourished and 2 undernourished children which colostrums was not being fed.

4 literate mothers had the knowledge on the cause of diarrhoea and 1 literate mother did not know the root cause of diarrhoea. Whereas 5 illiterate mothers had the knowledge, 5 mothers had a little knowledge and 5 did not have any knowledge on the root cause of diarrhoea. According to the findings, having education somehow made a difference on the knowledge of the mothers on the cause of diarrhoea.

Hand washing before food also impacts health status of the child and it also link with diarrhoea, out of 24, 5 illiterate mothers hardly wash hands regularly before feeding their children

In the table 34, it shows that mother's educational status impacts the nutritional status of the child, according to the findings, the literate mothers have no severely malnourished children, which education somehow impact their awareness level and knowledge in food practices and child rearing.

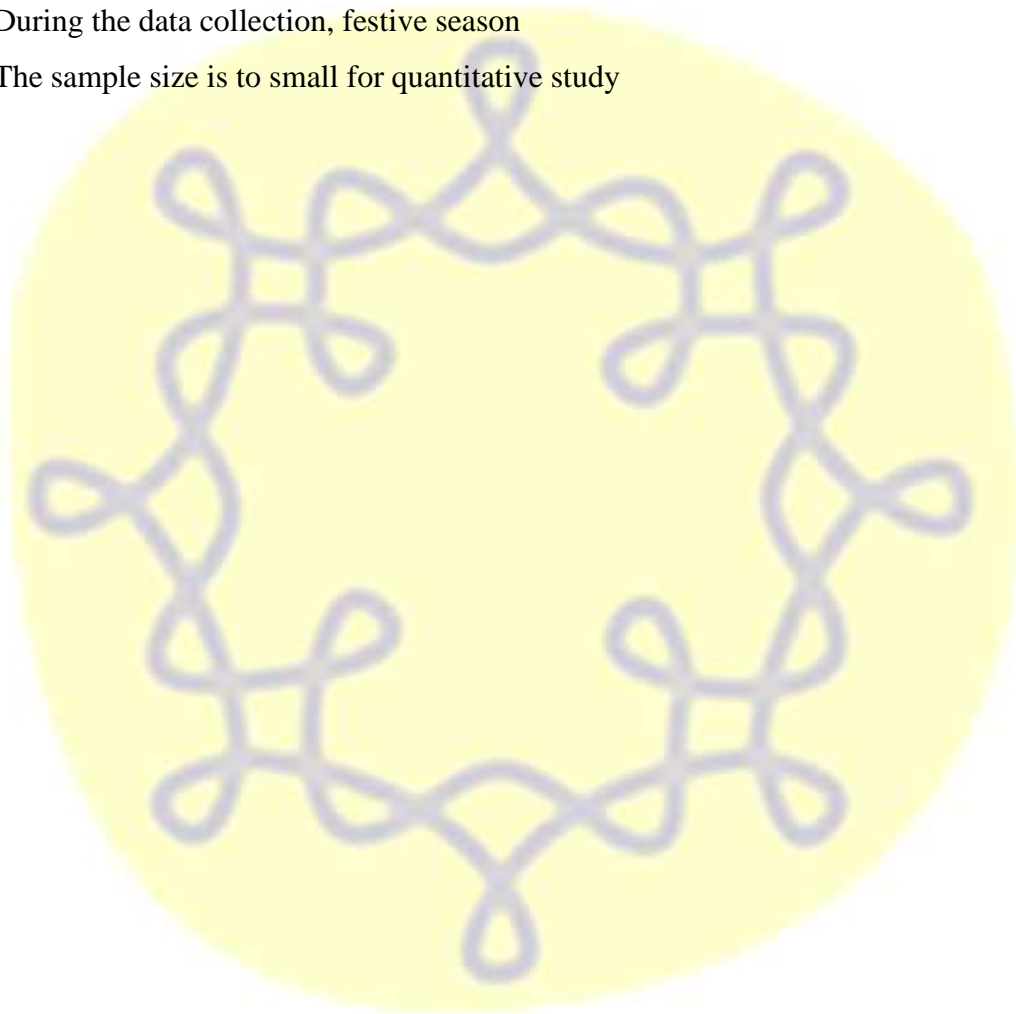
## **Conclusion and recommendations:**

Child malnutrition still remains a public health problem, the study has helped me in gaining a deeper understanding of the data but more importantly beyond the data which had given me insight leaning through interactions and a lot of things that the community had taught me in the journey of my field exposure. Through my research it has helped me in identifying the underlying issues that I was not been able to identify earlier. I found out by using the growth chart, the number of severely malnourished children were 12 which the anganwadi told there were only 3 severely malnourished children. It was also an eye opener for me that there are chances of other things happening that need to be alert.

The main purpose of this research study was to understand how the literacy status of the mothers impacts the nutritional status of their children. Through conducting my research it has helped me gaining understanding and a need to apply the ethical aspects for the protection of the respondents and well as the researcher.

## **Limitations of the study:**

1. There was a language barrier in communication, which an interpreter was needed to interpret and to communicate
2. Most children were not able to trace out due to shifting of houses to new multi story buildings
3. Wasn't able to collect the required number of sample size
4. During the data collection, festive season
5. The sample size is too small for quantitative study





## Annexure A Survey Guide

Demographic details:	
	Respondent no. _____
	Respondent name: _____
	Age: _____ Don't know _____
	Religion _____
	Education status: <ul style="list-style-type: none"> <li>• Can you read and write: Both read and write [ ] Read only [ ] Cannot read and write [ ]</li> <li>• Highest class obtained: _____ - _____</li> </ul>
	Types of Family? (a) Nuclear [ ] (b) Extended Nuclear [ ] (c) Joint [ ]
	Type of house (a) Kutchra [ ] (b) Semi-Pucca [ ] (c) Pucca [ ]
	Years of resettlement (a) Less than one year (b) 1 to 5 years (c) 6 to 10 years (d) 11 to 15 years (e) 16 to 20 years (f) Entire life
	Social category: (a) SC [ ] (b) ST [ ] (c) OBC [ ] (d) OC [ ]
	Status of occupation: <b>Husband's occupation:</b> <ul style="list-style-type: none"> <li>• Self employed [ ] Daily wages worker [ ] Seasonal wages worker [ ] Specify _____</li> <li>• Number of hours of work per day: _____</li> </ul> <b>Mother's occupation:</b> <ul style="list-style-type: none"> <li>• Home maker [ ] Domestic worker [ ] Daily wages worker [ ] Seasonal wages worker [ ]</li> <li>• Number of hours of work per day: _____</li> </ul>
	Economic category: Type of ration card (a) Red card/BPL [ ] (b) Blue card/APL [ ] (c) Yellow card/Antodaya [ ] (d) NA [ ]
	Family income: (a) Daily: _____

(b) Monthly: _____
<b>Family structure:</b>
Number of pregnancies _____
Number of deliveries _____
Number of children: <i>Male</i> [ ____ ] <i>Female</i> [ ____ ]
<b>Household environment general:</b>
Type of cooking fuel: <i>(a) Firewood</i> [ ] <i>(b) Kerosene</i> [ ] <i>(c) Bio gas</i> [ ] <i>(d) LPG</i> [ ]
Separate kitchen: <i>(a) Yes</i> [ ] <i>(b) No</i> [ ]
Present and Using Sanitary Latrine <i>(a) Yes</i> [ ] <i>(b) No</i> [ ] <i>Latrine at house</i> [ ] <i>Open defecation</i> [ ]
Main source of water in the household <i>(a) Public tap</i> [ ] <i>(b) Hand pump</i> [ ] <i>(c) Rain water</i> [ ] <i>(d) Government Water tanker</i> [ ] <i>(e) Private water tanker</i> [ ] <i>(f) Others (specify)</i> _____
<b>Mother's health</b>
Did you attend all the 4 ante natal check up? <i>(a) Yes</i> [ ] <i>(b) No</i> [ ]
Did you receive supplementary food from anganwadi during lactating period? <i>(a) Yes</i> [ ] <i>(b) No</i> [ ]
<b>Child's details</b>
Child's name: _____
Birth weight: _____
Child's age: _____
Where was the child born?

Government hospital[ <input type="checkbox"/> ] (b) Private hospital[ <input type="checkbox"/> ] (c) Clinic[ <input type="checkbox"/> ] (d) Home[ <input type="checkbox"/> ] (e) Others _____
Was your child born prematurely? (a) Yes [ <input type="checkbox"/> ] (b) No [ <input type="checkbox"/> ], If yes, which month _____ Weeks _____
Has the child fully immunised according to the age? (a) Yes (b) No If _____ no, _____ why? _____
<b>Hygiene and sanitation</b>
Do you wash hands before feeding the child? (a) Yes [ <input type="checkbox"/> ] Sometimes [ <input type="checkbox"/> ] No [ <input type="checkbox"/> ]
Do you wash your hands regularly washed with soap after use of latrine? (a) Yes [ <input type="checkbox"/> ] (b) Sometimes [ <input type="checkbox"/> ] (c) No [ <input type="checkbox"/> ]
If the child does not use toilet, where did you dispose your child's feces the last time he/she defecated (a) Dropped into toilet latrine [ <input type="checkbox"/> ] (b) Rinse/washed away in open area [ <input type="checkbox"/> ] (c) Rinsed/washed away in drainage system [ <input type="checkbox"/> ] (d) Disposed somewhere outside [ <input type="checkbox"/> ] (e) Buried [ <input type="checkbox"/> ] (f) Other _____
<b>Child's feeding practice</b>
Was colostrums fed to the child? (a) Yes [ <input type="checkbox"/> ] (b) No [ <input type="checkbox"/> ]
Do you still breastfeed now? (a) Yes [ <input type="checkbox"/> ] (b) No [ <input type="checkbox"/> ] If no, till when did you stop? _____ Year _____ Months
Was exclusive breastfeeding given till which month? (a) Less than 1 month [ <input type="checkbox"/> ] (b) less than 3 months [ <input type="checkbox"/> ] (c) 4-6 months [ <input type="checkbox"/> ] (d) more than 6 months [ <input type="checkbox"/> ] (e) specify _____
What milk did the child drink, if not breastfed? (a) Cow's Milk [ <input type="checkbox"/> ] (b) Other, please specify _____
How do you feed the child?

(a) Hand [ ] (b) Bottle [ ] (c) cup [ ] (d) Spoon [ ] (e) Others _____
After which month old, do you introduce weaning food? [ _____ ] months
How many times in a day do you give food to your child? >2meals [ ] 3meals [ ] 4meals [ ] <5meals [ ]
Do you know about non nutritious food which affects the child? (a) Yes (b) No If _____ yes _____ which _____ type _____ of food? _____
<b>Child's health</b>
Does your child suffer from diarrhoea regularly? (a) Once a week [ ] (b) Twice a week [ ] (c) 2-3 times a month [ ] (d) others _____
According to you, what can cause diarrhoea? Due to dirt around [ ] Due to uncovered food [ ] Due to flies [ ] Others _____
What do you do when your child gets diarrhoea (a) ORS [ ] (b) Home solution of water salt and sugar [ ] (c) Self medication [ ] (d) Go to doctor [ ] (e) Others _____
Do you have any records of sickness of the child in the last one year? Yes/No If yes, what was the sickness?(multiple choices) (a) Fever [ ] (b) Diarrhoea [ ] (c) Skin rash [ ] (d) Common cold [ ] (e) Cough [ ] (f) Difficult breathing [ ] (g) Malaria [ ] (h) Vomiting [ ]

(i) *Worm infection* [ ]  
 (j) *Others, specify* \_\_\_\_\_

**Anganwadi services**

Do you receive food from anganwadi?  
 (a) *Regularly* [ ] (b) *Irregular* [ ] (c) *Never receive* [ ]

Do you receive medicines from the anganwadi?  
 (a) *Regular* [ ] (b) *Irregular* [ ] (c) *Never receive* [ ]

**Supplementary food receive**

Food items	Quantity	Period Receive

What awareness do you get from the anganwadi? (more than one option can be marked)

	Yes	No
Diarrhoea		
Breastfeeding		
Healthy eating		
Hand wash		
Complementary feeding		
Growth Chart		
Hygiene		
De worm infestation		
Malnutrition		
Junk food		
Other _____		

Additional \_\_\_\_\_ information:  
 \_\_\_\_\_



## Annexure B

### Consent form:

Title: A study on factors affecting the nutritional status of children 0-3 years of age in Indranagar, Bhopal, Madhya Pradesh

I have read and understand the participation information sheet (or it has been read to me). I understand that it includes me for taking part in an interview. I have been explained the purpose and the way of the study. I have been informed that there will be no direct benefits for me. I understand that the information I will provide is confidential and will not be disclosed to any other party or in any reports that could lead to my identification. I also have been informed that the data from study can be used for preparing reports and the reports will not contain my name or identification characteristics. I have been provided with the name and contact details to whom I can contact. All my questions have been answered to my satisfaction. I had enough time to decide whether I am going to participate or not. I know that I am participating as a volunteer and I can step out of the programme whenever I want and it is not necessary to give an explanation. I know that research team will see my details. I give consent for my details to be used for the research purposes mentioned in this form. All information regarding consent and purpose of the study has been explained to me in the language I understand. I provide consent to the following:

	Yes	No
<b>Participation in the in-depth interview</b>		
<b>Audio-recording of the in-depth interview</b>		
<b>Publishing of words/sentences spoken in interview verbatim</b>		

Name of participant: \_\_\_\_\_

Date: \_\_\_\_\_

Place: \_\_\_\_\_

Signature or LTI

## Annexure C

### Withdrawal of consent:

I hereby wish to **WITHDRAW** my consent to participate in the study described above and understand that such withdrawal **WILL NOT** endanger my relationship with the Institute of Public Health

Name of participant: \_\_\_\_\_

Date: \_\_\_\_\_

Place: \_\_\_\_\_

Signature or LTI

## **Annexure D**

### **Participants Information Sheet:**

My name is Dala Akor KharPhanbuh. I am a student of the Community Health Learning Programme (CHLP) in an NGO called SOCHARA (Society for Community Health Awareness Research and Action) in Bangalore. As a part of this programme, I am conducting a research study along with SOCHARA-CPHE in order to understand more about the factors affecting the nutritional status of children. I would like to kindly request your permission to participate in this study.

This note provides an explanation of the nature of the research. This sheet may contain words that you do not understand. If there is anything you need clarity on, please feel free to ask me. At the end of this information sheet you will find my contact details

Nutrition has a significant influence on growth and development, particularly during early childhood, which later impacts all aspects of health as overall physical, mental, emotional and social well being. Where the nutritional status is like an indicator that refers to the physical being of child in weight and height.

There are many factors that impact the nutritional status of a child that can either lead to malnutrition or obesity. I want to know more about the various factors that impact the growth and development in a child.

I would like to ask you few questions about the past and current situations of your child which will also includes your awareness, child feeding practices and the services you receive from anganwadi centre. Your answers will be very important in helping us to understand the underlying factors that impact child nutritional status.

Some of the questions are very personal and if you do not feel comfortable to answer you can refuse them. Your participation in this study is voluntary and you can withdraw at any time you do not need to give any reasons for not answering the question.

The interview will be around 20-30 minutes along with your permission; I will also record the whole interview. If you are not comfortable with this, please let me know I will write instead of recording and with your consent your words will be copied exact for the purpose of creating a report. I assure you that everything will be confidential and your identity will be protected. All confidential data will be handling only by me.

All the information are used only for research purpose.

You are not receive any resource of benefits for participating in this study but the information that you provide might help us to give you suggestion maintain healthy life.

For more information or clarification:

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*Phone: +91-80-25531518, 25525372*

***Thank you for your time. This sheet is for you.***

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