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A Format of a Drug Study

COMMUNITY HEALTH CELL
(First Floor) St. Marks Road
BANGALORE - 560 001

Drugs in Small Rural Hospital
: A repliminary study

Note: Tick where indicated

A. General Description of hospital

1. State in which hospital located:

2. Bed strength: <25 ~25 >50

3. Staff position (specify number and grades):

a. Medical Officer

b. Nurses

c. Others

4. Facilities available

a. Laboratory b. X-ray

c. Pharmacy d. O.T.

5. Patient load - numbers seen in last year.

a. Out-patients:__________ b. In-patients:__________

6. Commonest disorders seen (top 5 only)

	Medical	Obst & Gynae	Paediatric	Surgical
OPD				
IPD				

B. Drug Availability (range and type)

7. How many drugs are available in your pharmacy?

a. tablets/capsules:

b. Injections:

c. Syrups/liquids:

d. Skin/eye/ear: __________

e. Total __________

p.t.o....2

8. What are the brands you stock in the following categories? (Mention brand names (company names in brackets) eg., Baralgan (Hoechst))

   a. Antibiotics

   b. Analgesic/antipyretic

   c. Anti-inflammatory

   d. Antidiarrhoeals

   e. Steroids

   f. Hormonal preparations

   g. Psychotropic drugs

   h. Anti-histaminics

   i. Cough syrups

   j. Tonics/Vitamins

   k. Skin preparations

   l. Non-allopathic drugs (or combinations)

   m. Food substitutes

   n. Eye/ear preparations

9. What fixed-drug combination drugs do you stock in the following categories?

   a. Antibiotics

   b. Vitamins with other drugs

   c. Steroids with other drugs

   d. Antihistaminics with others

C. Drug selection/Purchase/Pricing

10. Who selects drugs in your hospital?

11. What are all the criteria for selection?

12. Do you purchase -

    a. whole sale; retail; through medical representative

    b. by generic names or brand names?

13. Do you purchase any drugs in bulk? Specify.

14. Do you prepare any medicines/mixtures/ointments in the hospital? Specify.

15. Do you get drugs donated from abroad? (Mention names and sources).

16. How do you price your medicines? (What percentage formula over wholesale-retail price)

    a. Injections:

    b. Tablets/capsules:

    c. Vaccines:

    d. Samples:

    e. Foreign drugs:

D. Dispensing/Prescribing

17. What categories of staff in your hospital -

    a. prescribe? b. dispense?

18.Do you have a trained pharmacist?

19. Does your hospital dispense drugs in any of the following situation? If so, in each one (a) who prescribes? (b) who dispenses? (c) is there a standardised list for each level?

a. Mobile clinics

(a)

(b)

(c)

b. Village Health Centre/Sub-Centre

(a)

(b)

(c)

c. School/Hostel/infirmary

(a)

(b)

(c)

d. Rehabilitation Centre

(a)

(b)

(c)

20. What is the regime you follow in your hospital for the treatment of (specify brand names of drugs) -

a. Malaria

b. Tuberculosis

c. Diarrhoea in children

21.a Do you have any policy about use of expired drugs?

b. If you use some beyond the expiry date, which are these?

c. For how long beyond expiry date do you use them?

22. Do you use any drugs as Placebos? Yes/No

    If yes, which are the commonest and for what situation?

23. Are you aware of the drugs banned by the Government in July 1983?

    Do you have a banned brand list?

    Have you weeded these drugs out of your hospital?

E. Drug information

24. How do you/your staff get information on drug indications/doses/side effects.

    a. Product literature - Yes/No

    b. Drug company handouts - Yes/No

    c. Any other sources

25. Do you have in your hospital -

    a. formulary;

    b. list of minimum/essential drugs; and

    c. standardised drug regimes?

F. Adverse Reactions

26. Have you had any adverse reactions with drugs in your practice in the last one year? YES/NO
    If yes, specify:

G. Drug Budget

26.1 What is the annual expenditure on drugs in the last financial year?

26.2 Did the pharmacy run at a loss or a profit? LOSS/PROFIT
If so, how much during that year?

H. Additional Information

27. Have you taken any initiatives in recent times to rationalise the prescribing/dispensing practices in your institution?

    What are they? How successful have you been?

28. If there are any other problems/issues that you have come across with your hospital, please mention them here.

29. Have you identified any forms of irrational prescribing, over-prescribing, under-prescribing or wrong prescribing of the medical practitioners in your area through prescriptions your patients may have brought with them? Give details.

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30. Are there any pressing drugs issues on which you would like reliable information?

31. Do you have any suggestions for issues/problems that should be discussed/considered at the workshop? Mention.

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URGENT
your prompt attention please

GD Ravindran
LT Menezes
Jose Joseph

St John's Medical College Hospital
Bangalore 560034

24 OCT 1984

Dear

The Catholic Hospital Association of India (CHAI) are holding a Workshop on 'Drug Prescribing and Drug Policy' as part of their annual meeting this year. The announcements and details have been given in the July/August issues of MEDICAL SERVICE. If we can move towards a rational and low cost drug policy in our hospitals, we can reduce the burden of our patients, the community and our institutions. This aim is in keeping with the CHAI's 'New Vision'.

As a preliminary to the Workshop, we are undertaking a survey on certain drug issues in our hospital. We would like you to give us frank feed back so that we can catalyse more relevant policy decisions.

The enclosed questionnaire should be filled in by you and sent back to :

COMMUNITY HEALTH CELL
326 V Main I Block Koramangala
Bangalore 560034

by the 10th of November 1984, latest. The short notice is regretted. However, keeping in mind the importance of the problem and the need for action, we are sure you will respond positively. The objective is to highlight common problems and issues not specific institutional problems.

In case you have instituted certain changes in policy during your work in the hospital, please refer to the earlier situation while answering the questions and mention changes brought about by you in Q.27.

Remember we are trying to determine what the situation is and not what it could be. Also none of the questions are a test of your knowledge!! or an evaluation of your institution!! It is just a study to stimulate action in the CHAI network.

For your information, the MEDICAL SERVICE--Oct-Nov 1984 issue will give useful background information on drugs. Write to Fr John Vattamattom, Editor, MEDICAL SERVICE, CBCI Centre, Goldakkhana, New Delhi 110001, for your copy.

Looking forward to an early reply and hoping to meet you during the Workshop,

Yours sincerely,

GD Ravindran LT Menezes Jose Joseph

enclosure

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: A Preliminary study

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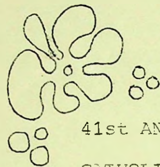
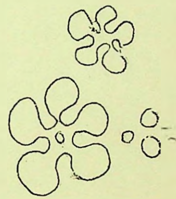


41st ANNUAL CONVENTION

CATHOLIC HOSPITAL ASSOCIATION OF INDIA

23-26 NOVEMBER 1984

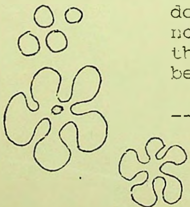


WORKSHOP THEME:

towards a people-oriented drug policy

'Eternal vigilance is required to ensure that the health system does not get medicalised, that the doctor-drug producer axis does not exploit the people and that the abundance of drugs does not become a vested interest in ill-health'.

---ICMR/ICSSR Health for All Report.



Venue: ST JOHN'S MEDICAL COLLEGE, BANGALORE 560034

COMMUNITY HEALTH CELL
47/1,(First Floor)St. Marks Road
BANGALORE - 560 001

SIGNIFICANCE OF THE THEME

THE Workshop is to help participants understand the issues relevant to drug prescribing, drug distribution and pharmacy policy in our institutions in the context of the ICMR/ICSSR warning and to challenge them to participate in the growing national response to the problem.

WHAT does the 'abundance of drugs' mean to the millions of the poor in our country who struggle in life to make both ends meet? Can they ever have access to the modern health care system which has become a business today, rather than remaining at the service of humanity at large? Do they have essential and life saving drugs at their reach within a price range they can afford?

IS our drug policy today more profession-oriented, drug industry-oriented rather than patient-oriented? Whose interests are we serving in our institutions?

HOW can we move towards a more people and patient-oriented drug policy?

THESE are some of the QUESTIONS which we shall respond to in our Workshop.

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"Community Health is a process of enabling people to exercise collectively their responsibilities to maintain their health and to demand health as their right. Thus it is beyond mere distribution of medicines, prevention of sickness, and income generating programmes".

--CHAI new vision

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OBJECTIVES

1. TO CREATE AN AWARENESS OF:-

   the health situation in India, the role of drugs in health care, the pattern of drug production in India vis-a-vis the people's health needs, the dynamics of the drug industry, the pattern of drug distribution and availability in the health system, the national drug policies and laws.

2. TO CREATE AN AWARENESS OF:-

   irrational use, over use and misuse of drugs by health personnel.

3. TO DISCOVER

   the social, economic, political, cultural and other factors responsible for this problem.

4. TO DISCOVER

   how all of us are part of the problem at a personal level.

5. TO CONSIDER

   the various responses at national/regional levels in the areas of :-- consumer awareness and people's movements; continuing professional education; pressure group on policy makers; search for low cost alternatives; individual/group action; institutional policy changes.

6. TO DISCOVER

   ways and means by which we can respond to this situation at individual, institutional and regional/national levels.

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PROGRAMME HIGHLIGHTS

Sessions on:

Understanding the problem
Drugs and the healing ministry
Towards rational therapeutics
What to do to tackle the problem
Some initiatives in the country
The people's medicine

Group discussions on:

What/why the problem in our health institutions?
What can we do to tackle this problem?

Liturgy

Reflecting on our calling and the faith dimension of our response

Exhibition on:

Socio-political dimensions of Health and Drugs
Rational Drug Therapy
Home remedies and Herbal medicines

Studies on:

Drugs for a Community Health Center
Understanding the injection/tonic culture
Use/misuse of drugs in surgery
Drug situation in small rural hospitals
Cost of treatment

Cultural Programme

Understanding the problem from the poor man's point of view.

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SYNOPSIS OF PAPERS

Drugs for Primary Health Care (C M Francis)

An integral part of our commitment to primary health care is the provision of essential drugs to all those who need them, in adequate quantity and quality and at affordable prices wherever the person is. The various aspects of the drug problem needing our attention include production, what drugs are required, choice of drugs, National Drug Policy, selection of drugs, drug production and procurement, logistics of supply, quality control, regulating the drug trade, drugs for immunization, drugs for cure, drugs for symptomatic relief, search for new drugs, drug information and the need for evaluation of the efficacy of primary health care including drugs.

The Ten Commandments of the Drug Industry (Augustine Veliath)

1. Thou shalt have tens of thousands of drugs
2. Thou shalt not question the price of a drug
3. Thou shalt not tamper with nature's garden
4. Thou shalt respect they doctor more than thyself
5. Thou shalt betray thy people and thy nation for petty rewards
6. Thou shalt not covet, court, or subscribe to any other system of medicine
7. Thou shalt never reveal company secrets
8. Thou shall first seek remedies for fashionable ailments
9. Thou shalt be a dumping ground for banned drugs
10. Thou shalt be a guinea pig for new and untried drugs.

The Ethics of Prescribing (George Lobo, sj)

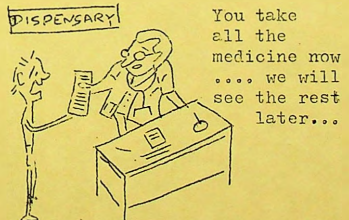
Discusses reasons for the unfortunate situation related to drugs prevalent today, viz., technological model of health care leading to manipulation of the patient, search and demand for instantaneous cure of symptoms, mystification of medicine, profit motive and 'free enterprise' of the pharmaceutical industry, a deep rooted cultural alienation from the people, exploitation of dependent developing countries, decreasing emphasis being given to preventive medicine and other systems of medicine.

The use of drugs should be regulated by the principles of totality (overall good of the patient) and of double effect (the good effect overriding any harmful effect). It suggests remedies for the development of a person-centred and holistic approach to health care.

Professionals in the Church - an introspection (George Joseph)

Serious questions have been raised about the institutional witness of the church in India, particularly its relevance in the social context of today. In the case of the Healing Ministry there is urgent need to critically look at our priorities and commitment and our style of functioning in the light of the gospel. The role of the professionals have to be reassessed as part of an overall effort to bring back the true spirit of 'Diakonia' into this ministry.

The whole issue regarding the need for evolving a 'rational drug policy' has to be seen in this perspective.



<u>What is Rational Drug Therapy?</u> (Mira Shiva)

Rational drug therapy means practice of socially conscious, relevant, concerned and yet scientifically sound medicine. It recognizes the non-role of drugs in certain conditions, the role of alternative systems of medicine and recognizes the limitations of Western Medicine in our social context.

It emphasises selective use of drugs based on essentiality, efficacy, safety, easy availability, easy administration, quality drugs preferably of indigenous production.

Rational Drug Therapy recognizes the concept of essential drugs and the concept of graded essential drug lists for different levels of health personnel. It recognizes the right of health personnel and consumers to drug information and its effective communication.

It is taking of a conscious decision to boycott certain drugs and use others only when needed. It means prescription with awareness, to avoid as far as possible -- iatrogenesis (drug induced problems, drug interactions, adverse drug reactions and emerging drug resistance).

It is understanding the role of drugs and rational drug therapy in the emerging health movement.

<u>What can be done at a pharmacy level</u> (Alan Cranmer)

(a) Management of Pharmacy Services include involving the users of the service; the Pharmacy Committee - its constitution and functions, viz., implementation of hospital policy, selection of medicines, sources of medicines, cost versus quality, basic drugs and formulations, medicines banned in India and abroad, medicines from other systems; stock control; prescribing discipline and pharmacy discipline.

(b) Good dispensing services involve need for good professional service to patients, proper presentation of patient's medicines, preparation of medicines in the pharmacy compared to purchase, medicines in the pharmacy and at clinic level.

contd.....

(c) Relationships with suppliers, ie., with representatives in the pharmacy and an assessment of products offered and their sources.

(d) Educational requirements - basic courses, legal requirements, course content, continuing education for pharmacists.

(e) Relationships with hospital colleagues.

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INITIATIVES IN THE COUNTRY

(1)
Arogya Dakshata Mandal, Pune has been raising awareness about drug related issues among medical professionals and the lay public since the past 8 years. They publish a monthly--'Pune Journal of Continuing Health Education'-- on drug issues and are also bringing out a book 'Rational Drug Therapy' in December 1984.

They launched a movement called 'Operation Medicine' in 1977 against irrational prescription of vitamins, tonics and tinned foods.

(2)
All India Drug Action Network: A number of groups have been working in the field of drug related issues at various levels during the past 3-4 years. They have been in contact with each other and have been working informally together sharing information, putting forward a memorandum (demanding a Rational Drug Policy), participating in campaigns, lobbying with government etc. In August 1984, they felt the need to have a more organized base and have formed the All India Drug Action Network. CHAI is also a member of the Network.

(3)
Lok Vigyan Sanghatana, Maharashtra, or the People's Science Movement have launched campaigns about anaemia and irrational anti-anaemia drug preparations and also about over the counter drugs. They organize jathas, hold district/ town seminars, write in the mass media etc.

(4)
Kerala Sastra Sahitya Parishad is a voluntary non-government organization consisting of scientists, doctors, engineers, social scientists, teachers, students, workers, peasants, technicians who are committed to popularising science and channelising it for social revolution. The KSSP has recently decided to take up the Drug issue and initiate a big campaign to expose the anti-people and exploitative tactics of the Multinational Drug Companies. The questions of essential versus non-essential and dangerous drugs, the inadequacy of drug safety control measures, the rising prices of life saving drugs and the non-implementation of the Hathi Committee recommendations are the highlights of the programme.

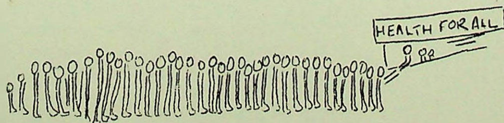
(5)
LOCOST or Low Cost Standard Therapeutics is a collective voluntary enterprise for rational therapeutics. LOCOST aims to promote low cost, scientifically tested medicine under generic names. LOCOST is a response to a growing demand and challenge of the voluntary health sector to meet the needs of the deprived sectors of the society for not only low priced but also good quality medicine. LOCOST includes procurement, quality testing and control, distribution and educational efforts, and is located in Gujarat.

(6)
Bangarapet Mission Tablet Industry in Karnataka is a successful small scale venture providing low cost, good quality formulations to some mission hospitals in the country.

(7)
Low Cost drugs and Rational Therapeutics Cell of the Voluntary Health Association of India, New Delhi, has been instrumental in bringing together various groups in India on the issue of drugs. They have been providing informational backing to these groups, organizing meetings, informally coordinating some actions etc.

(8)
medico friends circle is a group of socially conscious individuals, interested in the health problems of our people. Through their monthly bulletin, they discuss drug issues among others. They have formed a Rational Drug Policy Cell and have launched a campaign on anti-diarrhoeals.

(9)
The Kurji Holy Family Hospital Formulary is the result of the accumulated experience of the hospital over the last 10 years. It gives a comprehensive, list of drugs to treat 98% of the hospital admissions. It also gives the generic name, dosage, indications, contra-indications and side effects of these drugs. Information about comparative cost of treatment is also provided.



(10)
State Forums: During the past year drug action forums have been active in Andhra Pradesh and West Bengal. Drug Action forums are also being initiated in Gujarat and Orissa.

(11)
The Pharmacology Department of the Post-Graduate Institute of Medical Education and Research, Chandigarh, provide unbiased technical information on drugs and therapeutics through a monthly publication 'The Drugs Bulletin'.

(12)
Others: The following organizations have also been involved in drug related issues and are part of the All India Drug Action Network:

Consumer guidance Society of India, Bombay
Consumer Education Research Centre, Ahmedabad
Federation of Medical Representatives Association of India
Health Services Association, Calcutta
Delhi Science Forum, New Delhi
People's Participation in Science and Technology, Madras/Bangalore
Centre for Science and Environment, Delhi
Centre of Social Medicine and Community Health, J N University, New Delhi

W h a t w e c a n d o ?

-- Support them

-- Join them

-- Keep them informed about what you are doing

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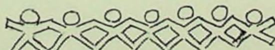

RESOURCE MATERIALS

- People, Pills and Prescriptions, column in MEDICAL SERVICE since May-June 1984.
- Objectives of the Workshop, a handout.
- Understanding the Drug situation in our Hospitals, a check list.
- Towards a People-Oriented Drug Policy, Special Convention Issue of MEDICAL SERVICE (October-November 1984) and a supplement to this issue will be distributed during the Workshop.
- Drugs awareness and Action, mfc BULLETIN Special Issue No.107 November 1984.
- DECCAN HERALD Supplement on the Workshop.

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"What people really need, first and foremost is clean drinking water, latrines, school and land, not urban hospitals with their wonder drugs".

-- Planning Commission

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AN INSPIRATION

Reading

The story of the sickman
at the pool of Bethsaida

John 5: 1-9

Reflection

The action of Jesus in bypassing the pool is an invitation to us to look more critically at our own health care system. Thanks to our emphasis on curative health care, we have grown accustomed to thinking solely in terms of the health needs of the individual rather than addressing ourselves to the community as a whole. While concentrating on the symptoms, we have failed to take into account the environment and other social factors. Poor sanitation, polluted water supply, the superstitious beliefs and taboos of the community are also related to sickness and disease.

Further, the miraculous pool in its ineffectiveness is a symbol of our own ineffective health care system despite the highly qualified doctors and nurses, well equipped private and public hospitals, medical research centres and multinational drug industry.

The poor man in the gospel story lived very close to the pool, yet he was helpless because of his poverty. In like manner the poor in our midst remain helpless in the shadow of an expensive, curative health care system that is geared exclusively to the service of the rich.

Source: The Bible: Aspirin or Dynamite
by Cedric Rebello s.j.

90.3

GIVE YOUR BABY THE BEST START IN LIFE

1. Should I breastfeed my baby?

Yes, every mother should breastfeed her baby. Breast milk is nature's first gift to your baby, and there is no other substitute for it. For the first 4 to 6 months, breast milk is your baby's best and complete food. Do not be misled by people who suggest powdered milk 'in case you think you do not have enough milk'. It has been found that almost all mothers are capable of producing more than enough milk for their baby's need.

Nature in all its wisdom has ensured that *you can* breastfeed successfully. All you need is the *determination* to breastfeed, and *faith* in your own ability to breastfeed successfully. Remember that breast milk has many qualities which make it unique from all other artificial milks available.

2. Will I be able to breastfeed successfully?

A common reason mothers give for stopping breastfeeding is the fear that they do not have enough milk, and so they introduce their babies to artificial feeds in the first few days after birth.

Research shows that in practice, almost every mother *can* breastfeed successfully. Rarely is there any physical reason for being unable to feed the baby naturally. The most important thing to remember is that the mother must *want* to breastfeed, have confidence in her ability to breastfeed successfully and must not lose hope.

Further, studies have shown that women who want to breastfeed actually produce more milk than those who don't want to. or are indifferent about breastfeeding their babies. Many women fail to breastfeed successfully, even though they want to, because they believe, incorrectly, that they do not have enough milk for their baby's need. The truth is that almost all mothers are capable of producing more than enough milk for their baby's need.

3. What is colostrum? Is it important for my baby?

For the first day or two, the milk that flows from the breast is called colostrum. This first milk is extremely nourishing for the newborn. What makes colostrum even more special is the fact that this first milk is full of antibodies produced by the mother. These antibodies protect the newborn against some diseases and infections at a time when the baby is particularly vulnerable. Later milk also contains these antibodies, but not as much as the first milk. In addition, colostrum also has certain properties that prevent allergic diseases like asthama and eczema which are more common in bottlefed babies.

Traditionally, in many Indian homes, colostrum is thrown away. Today we have learnt that in actual fact, colostrum is extremely valuable to the newborn. Throwing away the colostrum deprives the newborn of the best possible nourishment available, as well as the protection that it offers against disease. Colostrum is very rich in proteins, minerals and vitamins. In fact, colostrum is just what the newborn needs soon after its birth.

No matter where a mother delivers her baby, at home, hospital or the nursing home, she should

COMMUNITY HEALTH CELL
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insist that the baby is kept with her in the same room. This way she can ensure that her baby gets the benefits of colostrum. Put the baby to the breast soon after birth. The sooner the baby starts suckling the breast, the sooner and better the milk will flow. In addition, it will receive the benefits of colostrum which flows only for the first day or two. According to many doctors, colostrum has life-long health preserving benefits.

4. How often should a baby be breastfed in a day?

Babies usually cry when they are hungry. Put your baby to the breast each time it cries for a feed. This demand feeding is a better way to feed your baby instead of fixed schedules.

Babies could also cry for some other reasons, such as if their nappy is wet or if the clothes are too tight. Having checked that none of these is the source of trouble, you should interpret the baby's cry as its demand to be breastfed.

Your baby is a special person, an individual unlike other babies. It is not just a hungry stomach to be filled at regular intervals. Once you accept that the baby may ask for a feed at different times, depending on when it is hungry, you are well on your way towards breastfeeding successfully. If you worry each time it cries for a feed too soon, you are more likely to lose your milk. This happens because worry can interfere with the 'let down' of the milk from your breasts.

While some babies settle down to a routine of demand feeding after a few weeks, others don't. So do not compare your baby with other babies. Just breastfeed your baby when it cries for a feed.

As the baby grows it may ask for fewer feeds and may settle down to a regular demand routine, every two, three or four hours. Sometimes your baby may demand a feed more often than other times. This could be for many reasons: the baby may be extra hungry, growing rapidly, teething or is just upset. If the baby needs extra feeds, your own milk supply will adjust to its needs if you let the baby suckle as much as it wants to and whenever it demands a feed.

5. How long should each breastfeed last?

Let your baby tell you how long it needs to suckle your breasts to get its fill. A hungry baby will cry for milk. The old rule of 10 minutes on each breast was created because that was roughly the average time that a baby takes to feed. But each baby is different. So while some babies take less than 10 minutes to a side to get their fill, others may take longer.

During the first few months, you may find that your baby wants a feed very frequently. This is not unusual and is the baby's way of increasing your milk supply to suit its growing needs. People may tell you that a baby gets all the milk that it needs in the first few minutes at each breast. But all babies are not alike. A lot will depend on how vigorously the baby suckles, the strength of your 'let down' reflex and the time taken for the 'let down' or start of the milk flow.

Remember that some babies enjoy suckling even if they have had their fill. There is no reason to stop this unless you have some other work to do, or if you have sore nipples. This 'comfort suckling' is considered by many experts to be an important factor in the child's emotional development.

When your baby has had its fill on one breast, in other words, when it loses interest in feeding, change it to the other side. Let the baby continue feeding on the other breast as long as it wants to. There are times when the baby will feel less hungry, is sleepy or just tired and may not want to suckle very long. Don't worry about this, and don't force the baby to feed. Just offer your breast after a little while.

6. How does a mother know if her baby is getting enough milk?

It is true that when you breastfeed you cannot actually see how much milk the baby drinks. However, if your baby sleeps well, is healthy, active and playful when awake and gains weight steadily each month, then you can be sure that your baby is getting enough milk for its nourishment and growth.

7. How can I increase the flow of milk in my breasts?

The baby's suckling is the best way to start and increase the flow of milk in your breasts, and the sooner the baby is put to the breast, the sooner and better will be the flow of milk. Let the baby suckle as

frequently as possible because the more often a baby suckles the breast, the better it stimulates the breast to produce more milk. This is Nature's secret to start and increase the flow of milk to meet your baby's growing needs.

Sometimes emotions like embarrassment, tension, or fatigue can also interfere with the 'let down' of the milk. A mother should therefore, relax and sit comfortably when she feeds her baby.

When the baby suckles, it stimulates two hormones which are released into the mother's bloodstream. One of these hormones stimulates a strong flow of blood through the breasts and activates the milk making tissue. The other hormone causes the breasts to push out or 'let down' the milk from the breasts. This is generally felt as a 'pins and needles' sensation or a full feeling in the breasts. If the milk doesn't 'let down', your baby will not get all the milk that is available in the breasts. Fortunately Nature has ensured that when the baby suckles frequently, the 'let down' reflex works well.

8. *What should I eat to increase the flow of milk in my breasts? Are there medicines to increase this flow?*

There are no special foods or medicines to improve the quality and quantity of breast milk. To breast-feed successfully and to maintain her own health, a nursing mother should eat slightly more of the food she normally eats. There is no need to eat anything special. An extra helping of rice or chapati, dal, green leafy vegetables and fresh fruits will give the nursing mother all the nourishment she needs to produce enough milk for her baby and to maintain her own health. Eggs, fish and meat are also good. What is important is to eat slightly more of everything that she normally eats, rather than eating anything special while nursing her baby.

Finally be assured, *you can* increase your milk supply. Nature has made sure that when the baby suckles the breast frequently, the milk will flow well. All you need is the confidence in your natural ability to breastfeed successfully. Eat and rest well.

These early months can be a challenge, demanding much patience and determination on your part. So do relax and enjoy your baby. Remember that not only is your baby receiving the best food available, but also both your baby and you are building a happy and secure relationship during this period.

9. *How should a mother hold the baby while breast-feeding?*

There is no ideal position to hold the baby while breastfeeding. The main thing is to make yourself comfortable because you will be in that position for some time, and try to make the baby comfortable. Pain and discomfort can reduce the 'let down' of milk.

Support the baby's weight with a pillow on your lap. Another pillow under the arm supporting the baby will also help.If you are sitting, it is easier to feed if you sit upright and lean slightly forward. Hold the baby with its chest and stomach against you, so that it doesn't have to turn its head around and can feed comfortably. Some babies like to have something to hold on to while feeding—give the baby your finger to hold onto. At night, lie on your side and breastfeed the baby.

Don't push the baby's mouth onto your nipple. This could frighten the baby. Instead, stroke the side of its mouth with your nipple. If your breast is very full, you may have to hold it back so that the baby's nose is not smothered. But don't bother to hold your nipple or breast once the baby starts suckling. Expressing a little milk from a full breast will soften it enough to enable the baby to hold on.

When breastfeeding, part of the areola (the dark area around the nipple) should go into the baby's mouth as the milk reservoirs are under the areola and need to be emptied by the baby's suckling. If only the nipple goes into the baby's mouth, not enough milk will flow out. The baby would have to suckle extra hard and this could lead to sore nipples. If you have an extra large areola, hold it between the finger and thumb and squeeze them together. This will make the areola flatter and easier for the baby to take in its mouth.

You may notice that at times your baby stops suckling and looks around. This happens because the 'let down' causes the milk to be spurted in an uneven flow. Several spurts of milk come out, and then there is a short pause before the milk flows again. Your baby is adapting to the flow of your milk and its breathing pattern is also altered to fit in with this drinking pattern.

10. How should a mother stop a feed?

Some babies simply let the nipple go when they have had enough to drink, while others have to be gently removed from the breast. Some babies also like to suckle even after they have had their fill. This is called 'comfort suckling.' According to many doctors, this should be encouraged because it helps the emotional development of the baby.

Do not abruptly pull the baby's mouth away from your breast while it is feeding. The force could damage the nipple and the areola, apart from frightening the baby. Instead, put the tip of your little finger in the corner of the baby's mouth and gently draw the baby away.

11. How can I tell when the baby has had enough milk?

Babies often show they have had enough milk simply by falling asleep. But before they go to sleep, they may unclench their fists, smile, refuse to drink anymore or just arch their back. Don't force the baby to feed any more if it doesn't want to. Learn to accept your baby's judgement about when and how much it wants to feed.

12. Can a woman with small breasts produce enough milk?

Some women with small breasts worry about their capacity to produce enough milk for their baby's need. The size of the breasts have no relation to their capacity to produce milk. Women with small breasts *can* and *do* produce more than enough milk for their babies. Worry will only reduce the flow of milk. What is important is not the size of your breasts, but allowing your baby to suckle frequently. Frequent suckling will stimulate your breasts to produce more milk. This is the secret to successful breastfeeding.

13. Can a mother breastfeed while having her periods?

There is no reason why a mother should not breastfeed during her periods, since this will not harm her or the baby. Some mothers say that their babies are temperamental when they have their periods. This is quite likely due to the mother's own menstrual tension being communicated to the baby. There is no difference in the mother's milk, during her periods.

14. Can a mother breastfeed even when she is ill?

Yes, a mother can continue breastfeeding her baby even while she is ill, without harming the baby. In most cases, the baby will get the protection against the mother's illness from the antibodies present in breast milk.

Most medicines taken for illnesses do pass into the breast milk but in such small quantities, that they are unlikely to harm your baby. Consult a doctor who will prescribe medicines which are less likely to harm the baby. The doctor will also advise the mother to continue breastfeeding.

However if the mother has high temperature, jaundice or septacaemia, the doctor will advise her to discontinue breastfeeding until she recovers. A mother who has been advised to stop breastfeeding during an illness should however, express her milk regularly and throw it away until she has fully recovered from the illness. This practice will ensure that her flow of milk is not reduced. On recovery she should resume breastfeeding the baby.

During the period when she has been advised to discontinue breastfeeding, the mother can give the baby fresh cow, goat or buffalo milk or even milk from the local dairy centre. Do not dilute this milk.

Generally speaking in most common illnesses, a mother can continue breastfeeding without any ill effects on the baby.

15. Should a baby be breastfed even when ill?

Yes, your baby can certainly be breastfed even when it is ill. In fact it is very important that you continue breastfeeding while the baby is ill because your milk will provide the baby with antibodies to protect it from other illnesses which can set in when it is already weak. Breast milk will also give the baby the nourishment and strength to recover from the illness.

Do not stop breastfeeding when the baby is ill, unless your doctor advises you to stop. But this is rare. Unless your baby is so ill that it is not allowed milk, the baby will do better drinking breast milk than any other milk. Breast milk is much easier for

the baby to digest. Besides, the baby will recover faster from vomiting, diarrhoea and dysentry if it is given breast milk.

16. Can a mother breastfeed when she is pregnant?

Yes, a mother can certainly continue to breastfeed her baby all through her pregnancy without any ill effects on either the breastfed baby, the baby in the womb or herself. However, a pregnant woman who is breastfeeding her earlier child should eat slightly more for the sake of the breastfed baby and herself as well as for the baby growing in her womb. All three require good nourishment during this period.

17. Is it possible that breastmilk may not suit my baby?

Babies are rarely allergic to breast milk. Nothing could be more suitable than what Nature intended to feed your baby. In fact animal milk and powder milk are unnatural for the baby's system. It has been found that bottle fed babies are more likely to suffer from allergies like asthama and eczema. Bottle fed babies are also more prone to diarrhoea. Do breastfeed your baby. Breast milk is the safest and most nourishing food available for your baby.

18. What should a mother do about breastfeeding if she has had a caesarian operation?

Except in rare cases, there is no reason why a woman who has had a caesarian operation cannot breastfeed as successfully as the woman who has had a normal delivery. However, after a caesarian operation you are bound to be in pain. If you are determined to breastfeed, then you would have to put your pain and discomfort aside and insist that your baby be brought to you as soon as you are awake. As a bonus, breastfeeding your baby will help to compensate for some of the disappointment you may feel not having experienced a normal childbirth.

Unlike a mother who has had a normal delivery, you will not be able to breastfeed immediately after childbirth as you will be under the effect of general anaesthesia. However, *insist* that your baby be brought to you as soon as you are awake and kept with you. Also you should insist that you do not want your baby to be bottle fed. Put the baby to the breast whenever it cries for a feed, instead of feeding it at fixed schedules. It is vital that you put the baby to the breast as soon as you are awake, so that your baby is not deprived colostrum. Frequent suckling will stimulate your breasts to produce more milk. In a day or so, your milk supply will settle down to suit your baby's need.

At first you may face a problem deciding on a comfortable position to breastfeed. Sitting up after a caesarian operation can be painful. However, don't let this problem put you off breastfeeding. Lie on your side and let the baby suckle your breasts. After the baby has had its fill on one side, ask someone to help you turn to the other side and continue breastfeeding from the other breast.

Remember breast milk is the best and complete food for your baby, besides being the safest and most hygienic. For your baby's sake, put your pain and discomfort aside and insist on breastfeeding your baby as soon as you are awake. Do not let people discourage you from breastfeeding. After all, as a mother, you would not like to deprive your newborn of the best food available.

19. Should a baby be kept with the mother while she is still in the hospital or nursing home?

Every mother should insist that her newborn is kept with her in the same room, no matter where she is—at home, hospital or the nursing home. This is called 'rooming in'.

Many hospitals and nursing homes keep the newborn separately for the first few days. Although a nurse will bring the baby to the mother in the course of the day, she may give the baby an occasional 'top' or bottle feed. Even a single bottle feed of milk powder can disrupt the formation of the normal suckling habit and reduce the mother's milk supply.

This happens because suckling the mother's nipple requires greater effort on the baby's part. Nature intended it to be this way. This extra effort by the baby helps to stimulate the breasts to start and increase the flow of milk. On the other hand, suckling the feeding bottle is much easier. If your baby gets used to suckling from a feeding bottle, it

will not exert much pressure while suckling your breast. If the baby doesn't suckle hard enough, it will not stimulate the breasts enough to produce more milk. This can reduce the flow of milk from your breasts. Therefore it is vital that every mother insists that her baby is kept with her soon after birth and is exclusively breastfed. Not only would the baby get colostrum that flows for the first day or two, but frequent suckling whenever the baby cries for a feed will ensure a good flow of milk.

20. How can a working mother continue breastfeeding after she returns to work?

Most working mothers are entitled to three months maternity leave. A mother who is keen to breastfeed her baby should take as much of this leave after delivery. This will ensure that at least for the first three months of life, her baby is exclusively breastfed while she is at home. During this period, do not make the mistake of getting your baby used to bottle feeds before you return to work. Just because you have to return to work, does not mean that bottle feeding is the only answer to feeding your baby.

The problem of breastfeeding arises during the working hours when the mother is away at work. However, if she is determined to breastfeed, she can hand express her breasts in the morning before leaving for work. Store this expressed milk in a clean covered container which has already been properly sterilized in boiling water. This precaution would ensure that no germs enter the baby's body. Breast milk can be stored in the refrigerator for a few hours, and reused while the mother is away. Do not warm expressed milk directly over the fire. To warm this milk put the container in a bowl of hot water. A family member who stays at home with the baby can give the feed, using a clean spoon.

Once the mother returns home, she can breastfeed her baby. A working mother who wishes to breastfeed should follow this practice: breastfeed the baby before leaving for work; hand express your milk and store this milk which can be reused in your absence, and resume breastfeeding when you return. This will ensure that your baby is not deprived of your milk during these crucial months of life. Expressing your milk everyday before leaving for work acts as a double bonus. Besides providing the baby with the best nourishment available, it also prevents your milk flow from reducing.

Some mothers may complain that expressing breast milk every morning would involve much time and effort, just when she has so many other household chores to finish. But if you balance the benefits of continuing breastfeeding with this extra effort and time, you will be convinced to make the right decision—to continue breastfeeding. You will also have the satisfaction that your baby is getting the best possible nourishment. After all, breast milk is the best and complete food for the baby during the first 4 to 6 months of life. Remember, there can be no other substitute for it.

21. How do I express milk from my breast?

Wash your hands before you express the milk. Use both hands to squeeze gently from the base of the breast towards the areola (the dark area around the nipple) and the nipple. Then squeeze the breast and the areola between the fingers and the thumb till the milk flows out.

Collect this milk in a clean cup or container which has been boiled previously. Cover the container and store the milk in the refrigerator. Expressed milk can be stored in the refrigerator and reused within a few hours. If there is no refrigerator in your home, store the expressed milk in a cool place. Milk which is kept outside a refrigerator must be used within 2 to 3 hours after being expressed.

To warm the milk, put the container in a bowl of hot water. Do not warm expressed milk directly over the fire. Use a clean spoon to feed the baby.

22. What should every nursing mother know about cleanliness and care of her nipples and breasts?

Every morning while having a bath, wash your nipples and breasts with plain water. Avoid using soap on your breasts and nipples as this would remove the natural oils secreted by your breasts to keep them from cracking. While you do not have to wash your breasts and nipples before a feed, do remember to wash them after and dry them well. This precaution will prevent your nipples from cracking. Cracked or sore nipples can be painful. The important thing to remember is to wash your

breasts and nipples with water and keep them dry between feeds.

23. What should a nursing mother eat to maintain a good flow of milk?

There is no evidence that any food, drink or vitamins will increase or decrease the flow of milk, as long as you eat enough of a variety of foods. However to produce enough milk for the baby and to maintain your own health, you should eat a little extra of whatever you eat normally. An extra helping of rice or chapati, dal, fresh green leafy vegetables, fish, eggs, meat and fresh fruits will give you all the nourishment that you need to produce more than enough milk for your baby and will help you maintain your own health.

It is sensible to eat according to your appetite and try not to lose weight—the fat stored in your body during pregnancy will slowly be lost when you breastfeed. Avoid overeating. A mother who eats sensibly will not only provide her baby with plenty of milk, but will also ensure that her own body isn't being drained of food resources to meet her baby's need.

Even poorly nourished mothers manage to breast-feed their babies adequately for the first 4 to 6 months before extra food is required for the normal growth and development of the baby. However, these mothers breastfeed at the cost of their own bodies—their bodies lose calcium and proteins. The more babies these women bear and feed, the poorer their health becomes.

How much extra should you eat while nursing? You should eat slightly more than you do when you are not pregnant. Is there anything you should eat more of when feeding the baby? No. Assuming that you are eating a variety of food in your normal daily diet, just eat slightly more of everything. This will provide enough nourishment both for your baby and you.

24. Is it true that vegetarian mothers cannot produce enough milk and so should not breast-feed?

No, this is not true. A vegetarian mother can breastfeed successfully and produce enough milk for her baby. Traditionally in most Indian homes people eat a vegetarian diet, and women through the ages have lived and reared their children while eating a vegetarian diet. As long as the nursing mother eats slightly more than what she eats normally when she is not pregnant, she will produce more than enough milk for her baby. There is absolutely no reason to fear that a woman eating a vegetarian diet will deprive her baby of adequate nourishment. A vegetarian diet which contains a variety of foods like rice or chapati, dal, fresh green leafy vegetables, 'paneer', curd and fresh fruits will provide enough nourishment both to produce enough milk and to maintain the mother's own health.

25. Should a nursing mother drink extra water so that her milk is not too thick and is easy for the baby to digest?

The amount of water that a mother drinks has no relation to the consistency of breast milk, which differs from person to person. Some mothers fear that their milk is too watery, while others feel their milk is too thick for the baby to digest. The truth is that the consistency of breast milk has nothing to do with its quality. Breast milk, whether thin or thick is perfect for your baby.

In summer, a nursing mother finds herself very thirsty. This is hardly surprising, considering that the baby is taking a great deal of milk from you everyday. Don't force yourself to drink extra water, just drink as much as you want to.

26. Will breastfeeding spoil my figure?

No, breastfeeding will not spoil your figure. On the contrary, breastfeeding is Nature's way of restoring your figure. During pregnancy a woman's body stores up fat in preparation for nursing the baby. This extra fat is used up when the mother starts breastfeeding. In fact, breastfeeding helps the mother lose the extra weight she gains during pregnancy. In addition, the womb which has stretched to hold the growing baby, also regains its normal size when a hormone is released during breastfeeding.

27. Is breastfeeding effective in delaying the next pregnancy?

It has been found that frequent and regular breast-feeding may help to delay the next pregnancy. Breastfeeding alone, however, will not provide

complete protection. A mother who breastfeeds should also take some other precaution to avoid pregnancy.

28. When should a breastfed baby start eating soft foods? What should it eat and how do I start my baby on these foods?

For the first 4 to 6 months, breast milk is your baby's best and complete nourishment. After this, its growing body needs additional nourishment. You don't need to buy special foods for your baby. You can prepare them at home inexpensively from the same things you use for the family meal. However, your baby still needs breast milk in addition to its new diet, so continue breastfeeding as long as you can.

After the first 4 to 6 months, your baby must also get a share of the family foods. Give the baby one type of food at a time until it learns to enjoy a variety of foods. Start with small quantities and gradually increase them to suit its age and appetite. Feed the baby frequently.

Your baby will grow well on foods like kichari, dalia, dal mixed with rice or chapati, lightly cooked fresh green leafy vegetables, half boiled eggs and fish. Fresh fruits like papaya and banana along with fresh orange, musami or lime juice are also good for the growing baby.

Mash the food well to make it easy for the baby to swallow and digest. Add a little ghee, butter or oil. This makes the food tastier amd gives extra energy.

Soft foods should be given between breastfeeds. Encourage the baby to feed itself with its fingers. This is part of its growing and learning experience. By one year, your baby is ready to eat the food you prepare for the rest of the family.

29. Should a breastfed baby also be given extra vitamins and juices? At what age should these be given?

As long as the nursing mother is healthy and eats enough of a variety of foods, there is no need to give extra vitamins and juices to a breastfed baby for the first 4 to 6 months of life. Breast milk will give the baby all that it needs during this period.

Once the baby is 4 to 6 months old, its growing body needs additional nourishment. Your baby is now ready to eat soft foods. You can also give the baby fresh orange, musami or lime juice.

30. What precautions should I take when preparing a meal or feeding my baby?

Most mothers know the importance of hygiene. But often a busy mother may overlook some details of cleanliness. Can any mother afford to take this risk? The hidden dangers—germs that you cannot see—can lead to illnesses in the family. A baby is more likely to fall ill. You need to be extra careful if there is a baby at home.

Keep your home and surroundings clean. Germs breed in dirt and contaminated food and water, causing diarrhoea, and spreading diseases like cholera, dysentry and gastroenteritis. Drinking water must be strained through a clean cloth, boiled and cooled. Store this water in a clean covered container. Give your baby food which is freshly prepared. Wash your hands before you cook the meal or feed the baby. Keep utensils clean. Wash them well before and after use, and rinse under running water.

31. Are special baby foods available in the market better than soft foods prepared at home?

Special foods for babies available in the market are based on a mixture of powdered milk with some carbohydrates like wheat and rice. These foods which are cereal and milk based are expensive. On the other hand, a wise mother can provide her growing baby with all the nourishment it needs with the same things she uses to make the family meal. Instead of spending large sums of money on tins of baby foods, she can buy good wholesome food for the entire family, including the baby. Soft foods prepared at home give the baby a better variety of foods, in addition to providing all the nourishment it needs.

32. Should I give soft foods before or after a breastfeed?

Soft foods should be given between breastfeeds, preferably a couple of hours after a breastfeed. This is advised because a baby will not make an extra

effort to eat soft foods when it is very hungry. This is because suckling the mother's breast comes *naturally* to a baby, whereas it has to *learn* to eat soft foods. A hungry baby will be less interested in eating soft foods on an empty stomach. Having had a breast-feed a couple of hours earlier, the baby will not be too hungry when offered soft food and may show more interest in this food than otherwise.

On the other hand, if you offer the breast immediately after it has been fed soft food, the baby will not suckle the mother's breast strongly since it is not hungry at that moment. When the baby fails to suckle strongly, it will not stimulate the breasts to produce more milk. Eventually the flow of milk may reduce. Therefore, breastfeed your baby and offer it soft foods a couple of hours later. Give the next breastfeed a couple of hours after its last meal of soft foods. In this manner the baby will continue to get the double benefits of its mother's milk as well as soft foods.

33. Should a mother continue soft foods when the baby is ill?

It is incorrect to stop feeding a baby when it is ill. In fact the baby needs nourishment even more so to recover from its illness. Food will give it the strength to fight other illnesses which can set in when the body is already weak.

Soft foods like kichari, dalia, rice or chapati mixed with lightly cooked dal and vegetables will not harm the baby. Sometimes when the baby is ill, it does not feel hungry or may prefer to eat food other than what it normally eats. While recovering from its illness, the baby's appetite will improve. Give the baby slightly more than what it normally eats because it needs additional nourishment to regain its health.

34. Why does my baby have diarrhoea while teething? Is it because it is teething, or the fact that I have started giving it soft foods?

Often mothers tend to associate teething with diarrhoea. This is incorrect. Diarrhoea occurs when the baby eats contaminated food or drinks water which is contaminated. Moreover when a baby is teething, it tends to pick up things lying around the house and chew on it. These objects can carry germs into its body and cause diarrhoea.

If you prepare soft foods hygienically, there is no reason why the baby should have diarrhoea. Introducing soft foods will not cause diarrhoea, as long as they are well prepared. Wash your hands before you make the meal or feed the baby. Use fresh food. Use clean drinking water. Keep the utensils clean. These precautions will help to prevent diarrhoea.

35. What is diarrhoea?

Diarrhoea is not a single disease. It is a symptom that accompanies intestinal disorders. When a baby has diarrhoea, it passes frequent watery stools which may be foul smelling. Diarrhoea causes loss of vital body fluids and salts. In somes cases, the stools may also have blood and mucus.

36. Is diarrhoea dangerous?

Yes, diarrhoea can be dangerous especially for babies and young children below two years. If you fail to replace the fluids and salts that a baby loses during diarrhoea, it can lead to a dangerous situation called 'dehydration'. Remember prolonged diarrhoea can lead to dehydration and even death. Do not take diarrhoea lightly. Unfortunately some mothers think diarrhoea is not serious. This is not true. Diarrhoea can become very serious if you neglect it.

37. Is it true that breastfed babies have less chance of getting diarrhoea?

Yes, it is true that babies who are breastfed exclusively rarely have diarrhoea. Breast milk is not only free of germs but also helps to prevent the growth of those germs that cause diarrhoea. It has been found that bottle fed babies have diarrhoea six times more often than breastfed babies. This is because the feed is not prepared hygienically. For a bottle feed to be safe, you need to take many precautions, like sterilizing the feeding bottle and nipple and boiling the water to make the feed.

Breastfeeding takes care of all this trouble. Breast milk is the safest and most hygienic way to feed your baby. Breastfeed as long as you can, even when the baby has diarrhoea. Breast milk will give the baby all the nourishment it needs to recover, besides being easier for the baby to digest. In

addition, antibodies in your milk will protect the baby from other illness which can set in when the baby is already weak from diarrhoea.

38. What should I do when my baby has diarrhoea?

There is a simple and inexpensive treatment that every parent can administer at home. Start the treatment at the first signs of diarrhoea.

In a glassful of boiled and cooled water, add a pinch of salt (¼ teaspoon). Make sure this solution is not saltier than your tears. Then add two teaspoons of sugar or 'gur' and dissolve it well. The baby may refuse to drink this solution, but insist on giving the solution frequently in small quantities.

It is important that the baby drinks a glassful of this solution every time it passes a watery stool. This is approximately the amount of liquid it loses every time it passes a watery stool. So make sure that you replace the fluids it has lost. Continue giving this solution until the baby stops passing watery stools. Plain water which is boiled and cooled, rice kanji or coconut water can also be given in addition to the salt and sugar solution. Remember to continue breastfeeding and normal feeding during diarrhoea. If the baby's condition doesn't improve within two days, contact your doctor immediately.

39. What is ORS?

ORS stands for oral rehydration salts. These salts are specially prepared to deal with the loss of vital salts from the body. Mixed with boiled and cooled water, this ORS solution becomes a good rehydration fluid. They come in packets and are available at a chemist. Follow the instructions on the packet to make the solution.

40. Should I give tonics or special foods when the baby has diarrhoea?

You don't have to give a tonic or any special kind of food when the baby has diarrhoea. Just make sure that it drinks plenty of liquids and eats well when it has diarrhoea. When the baby has diarrhoea, you need to replace the fluids it loses. It also needs good nourishment to regain its strength both to recover and to fight against other illnesses which can set in when it is already weak.

Give the home prepared salt and sugar solution or the ORS solution every time it passes a water stool. Continue giving this solution until it passes normal stools. Some mothers simply stop feeding their babies during diarrhoea. This is not good for the baby for it needs nourishment. Give the baby lightly prepared foods like kichri, dalia or rice and curd.

41. What should I do to prevent my baby from getting diarrhoea?

Diarrhoea is caused by germs which breed in contaminated food and water, dust and unsanitary surroundings. These germs enter the baby's body through contaminated food or water.

There are simple measures that you can take to prevent diarrhoea. Keep your home and surroundings clean. Drinking water must be strained through a clean cloth, then boiled and cooled. Store this water in a clean covered container. Keep your utensils clean. Wash them before and after use and rinse under running water. Give your baby freshly cooked food. Wash your hands before you cook the meal or feed the baby. All clothes including undergarments and bed linen must be clean and fresh. Finally continue to breastfeed your baby as long as you can, even when the baby has diarrhoea. Breast milk is the safest and most hygienic way to feed your baby.

42. Would a breastfed baby catch a cold if the mother drinks cold water?

No, this is not true. Breast milk comes at the right temperature to suit the baby, irrespective of the cold or hot drinks the mother consumes.

43. Since breast milk contains antibodies, does this mean that a breastfed baby does not require immunization against common childhood diseases?

Although antibodies present in the mother's milk do give immunities to some common childhood diseases, every baby should be immunized regularly to completely eliminate the risk of these diseases. Table 1 gives the immunization schedule. Remember that immunization is effective only when a regular and complete dose is given. The

baby should not be ill at the time of immunization.

Breast milk contains mother's natural immunities to protect the baby against illness. Breastfeed your baby as long as you can. In addition follow the immunization schedule to completely eliminate the risk of common childhood diseases like tuberculosis, diphtheria, whooping cough, tetanus, poliomyelitis and measles.

TABLE 1 IMMUNIZATION SCHEDULE

WHEN	WHAT	WHY
3-9 months	BCG vaccine	protect against tuberculosis
3-9 months	3 doses of DPT and Polio vaccine at intervals of 4-6 weeks each	protect against diphtheria, whooping cough, tetanus & poliomyelitis
9-12 months	Measles vaccine	protect against measles
1½-2 years	1st booster for DPT and Polio	
5-6 years	DT booster	protect against diphtheria & tetanus

UNITED NATIONS CHILDREN'S FUND
73 LODI ESTATE, NEW DELHI - 110003

90.4.

INDIAN NATIONAL CODE FOR PROTECTION AND PROMOTION OF BREAST-FEEDING

GOVERNMENT OF INDIA
MINISTRY OF SOCIAL WELFARE
NEW DELHI

COMMUNITY HEALTH CELL
47/1, (First Floor) St. Marks Road
BANGALORE - 560 001

[Copy of Ministry of Social Welfare,
Government of India,
Resolution No. 18-11/81-NT
dated 19 December 1983]

Indian National Code for Protection and Promotion of Breast-feeding

The Government of India affirms the right of every child to be adequately nourished as a means of attaining and maintaining health. Infant malnutrition is a major contributory cause of high incidence of infant mortality and physical and mental handicaps. The health of infants and young children cannot be isolated from the health and nutrition of women. The mother and her infant form a biological unit. Breast-feeding is an integral part of the reproductive process. It is the natural and ideal way of feeding the infant and provides a unique biological and emotional basis for healthy child development. The anti-infective properties of breast-milk protect infants against disease. The effect of breast-feeding on child-spacing, on the health and well-being of the mother, on family health, on family and national economy and on food production is well-recognised. Breast-feeding is, therefore, a key aspect of self-reliance and primary health care. It is the nation's responsibility to encourage and protect breast-feeding, and to protect pregnant women and lactating mothers from any influence that could disrupt it. Inappropriate feeding practices lead to infant malnutrition, morbidity and mortality in our children. Promotion of breast-milk substitutes and related products like feeding bottles and teats do constitute a health hazard. Promotion of breast-milk substitutes and related products has been more extensive and pervasive than the promotion of

information concerning the advantages of breast-milk and breast-feeding, and contributes to decline in breast-feeding. In the absence of strong interventions designed to protect, promote and support breast-feeding, it can be anticipated that this decline will continue, and that even larger numbers of infants and young children will be placed at risk of infections, malnutrition and death. Only when young infants cannot be breast-fed, and when other sources of human milk are unavailable, other food becomes necessary. It is important for infants to receive appropriate complementary foods, usually when the infant reaches four to six months of age, and the emphasis should be placed on local foods and traditional practices, complemented only when necessary, and under proper guidance, by industrially processed products. Government appreciates that, guided by the highest considerations for the proper nutrition and health of the World's children, the World Health Assembly adopted in May 1981, an International Code of Marketing of Breast-Milk Substitutes. Government recognises that this code, although an important measure to regulate production and marketing of products which interfere with breast-feeding, is only one aspect of the measures government should undertake to protect and promote the healthy growth and development of infants and young children.

Educational systems, social services, families, communities, women's organisations and other non-governmental organisations should be involved in the protection and promotion of breast-feeding and other activities aimed at the improvement of maternal, infant and young child health and nutrition. In the light of the foregoing considerations, and in view of the vulnerability of infants in the early months of life and the risks involved in the inappropriate feeding practices, including the unnecessary and improper use of breast-milk substitutes and feeding accessories, it is necessary to regulate the marketing of such products. Government, therefore, resolves to adopt the following Code:

Article 1. Aim of the Code

The aim of this Code is to contribute to the provision of safe and adequate nutrition for infants, by the protection and promotion of breast-feeding, and by ensuring the proper use of breast-milk substitutes, when these are necessary, on the basis of adequate information and through appropriate marketing and distribution.

Article 2. Scope of the Code

The Code applies to the marketing, and practices related thereto, of the following products: breast-milk substitutes, including infant formula; other milk products, foods and beverages, including bottlefed complementary foods, when marketed or otherwise represented to be suitable, with or without modification, for use as a partial or total replacement of breast-milk; feeding bottles and teats. It also applies to their quality and availability, and to information concerning their use.

Article 3. Definitions

For the purposes of this Code:

"Breast-milk substitute"	means	any food being marketed or otherwise represented as a partial or total replacement for breast-milk, whether or not suitable for that purpose.
"Complementary food"	means	any food, whether manufactured or locally prepared, suitable as a complement to breast-milk or to infant formula, when either becomes insufficient to satisfy the nutritional requirements of the infant. Such food is also commonly called "weaning food" or "breast-milk supplement".

"Container"	means	any form of packaging of products for sale as a normal retail unit, including wrappers.
"Distributor"	means	a person, corporation or any other entity in the public or private sector engaged in the business (whether directly or indirectly) of marketing at the wholesale or retail level a product within the scope of this Code. A "primary distributer" is a manufacturer's sales agent, representative, national distributor or broker.
"Health care system"	means	governmental, non-governmental or private institutions or organisations engaged, directly or indirectly, in health care for mothers, infants and pregnant women; and nurseries or child-care institutions. It also includes health workers in private practice. For the purpose of this Code, the health care system does not include pharmacies or other established sales outlets.
"Health worker"	means	a person working in a component of such a health care system, whether professional or non-professional, including voluntary, unpaid workers.
"Infant formula"	means	a breast-milk substitute formulated industrially in accordance with applicable ISI standards, to satisfy the normal nutritional

		requirements of infants up to between four and six months of age, and adapted to their physiological characteristics. Infant formula may also be prepared at home, in which case it is described as "home prepared".
"Label"	means	any tag, brand, mark, pictorial or other descriptive matter, written, printed, stencilled, marked, embossed or impressed on, or attached to, a container (see above) of any products within the scope of this Code.
"Manufacturer"	means	a corporation or other entity in the public or private sector engaged in the business or function (whether directly or through an agent or through an entity controlled by or under contract with it) of manufacturing a product within the scope of this Code.
"Marketing"	means	product promotion, distribution, selling, advertising, product public relations, and information services.
"Marketing personnel"	means	Any persons whose functions involve the marketing of a product or products coming within the scope of this Code.
"Samples"	means	single or small quantities of a product provided without cost.
"Supplies"	means	quantities of a product provided for use over an extended period, free or at a low price, for special purposes, including those provided to families in need.

Article 4. Information and education

4.1 Government shall ensure that objective and consistent information is provided on infant and young child feeding for use by families and those involved in the field of infant and young child nutrition. This responsibility shall cover the planning, provision, design and dissemination of information and their control.

4.2 Informational and educational materials, whether written, audio, or visual, dealing with the feeding of infants and intended to reach pregnant women and mothers of infants and young children, should include clear information on all the following points: (a) the benefits and superiority of breast-feeding; (b) maternal nutrition, and the preparation for and maintenance of breast-feeding; (c) the negative effect on breast-feeding of introducing partial bottle-feeding; (d) the difficulty of reversing the decision not to breast-feed; and (e) where needed, the proper use of infant formula, whether manufactured industrially or home-prepared. When such materials contain information about the use of infant formula, they should include the social and financial implications of its use; the health hazards of inappropriate foods or feeding methods; and, in particular, the health hazards of unnecessary or improper use of infant formula and other breast-milk substitutes. Such materials should not use any pictures or text which may idealize the use of breast-milk substitutes.

4.3 Donations of informational or educational equipment or materials by manufacturers or distributors should be made only at the request and with the written approval of the appropriate government authority or within guidelines given by government for this purpose. Such equipment or materials may bear the donating company's name or logo, but should not refer to a proprietary product that is within the scope of this Code, and should be distributed only through the health care system.

Article 5. The general public and mothers

5.1 There shall be no advertising or other form of promotion to the general public of products within the scope of this Code.

5.2 Manufacturers and distributors should not provide, directly or indirectly, to anybody, samples of products within the scope of this Code.

5.3 In conformity with paragraphs 1 and 2 of this Article, there should be no point-of-sale advertising, giving of samples, or any other promotion device to induce sales directly to the consumer at the retail level, such as special displays, discount coupons, premiums, special sales, loss-leaders and tie-in-sales, for products within the scope of this Code. This provision should not restrict the establishment of pricing policies and practices intended to provide products at lower prices on a long-term basis.

5.4 Manufacturers and distributors should not distribute to pregnant women or mothers of infants and young children any gifts of articles or utensils which may promote the use of breast-milk substitutes or bottle-feeding.

5.5 Marketing personnel, in their business capacity, should not seek direct or indirect contact of any kind with pregnant women or with mothers of infants and young children.

Article 6. Health care systems

6.1 The health authorities in the country should take appropriate measures to encourage and protect breast-feeding and promote the principles of this Code, and should give appropriate information and advice to health workers in regard to their responsibilities, including the information specified in Article 4.2.

6.2 No facility of a health care system should be used for the purpose of promoting infant formula or other products within the scope of this Code. This Code does not, however, preclude the dissemination of information to health professionals as provided in Article 7.2.

6.3 Facilities of health care systems should not be used for the display of products within the scope of this Code, for placards or posters concerning such products, or for the distribution of material provided by a manufacturer or distributor other than that specified in Article 4.3.

6.4 The use by the health care system of "professional service representatives", "mothercraft nurses" or similar personnel, provided or paid for by manufacturers or distributors, should not be permitted.

6.5 Feeding with infant formula, whether manufactured or home-prepared, should be demonstrated only by health workers, or other community workers if necessary; and only to the mothers or family members who need to use it; and the information given should include a clear explanation of the hazards of improper use.

6.6 Donations or low-price sales to institutions or organizations of supplies of infant formula or other products within the scope of this Code, whether for use in the institutions or for distribution outside them intended for the recuperation of malnourished children and other medical reasons or for the infants of mothers who cannot breast-feed and who cannot afford to purchase adequate amounts, may be made. If these supplies are distributed for use outside the institutions, this should be done only by the institutions or organisations concerned. Such donations or low-price sales should not be used by manufacturers or distributors as a sales inducement.

6.7 Where donated supplies of infant formula or other products within the scope of this Code are distributed outside

an institution, the institution or organization should take steps to ensure that supplies can be continued as long as the infants concerned need them. Donors, as well as institutions or organizations concerned, should bear in mind this responsibility.

6.8 Equipment and materials, in addition to those referred to in Article 4.3, donated to a health care system may bear a company's name or logo, but should not refer to any proprietary product within the scope of this Code.

Article 7. Health workers

7.1 Health workers should encourage and protect breast-feeding; and those who are concerned in particular with maternal and infant nutrition should make themselves familiar with their responsibilities under this Code, including the information specified in Article 4.2.

7.2 Information provided by manufacturers and distributors to health professionals regarding products within the scope of this Code should be restricted to scientific and factual matters, and such information should not imply or create a belief that bottle-feeding is equivalent or superior to breast-feeding. It should also include the information specified in Article 4.2.

7.3 No financial or material inducements to promote products within the scope of this Code should be offered by manufacturers or distributors to health workers or members of their families, nor should these be accepted by health workers or members of their families.

7.4 Manufacturers and distributors of products within the scope of this Code should disclose to the institution to which a recipient health worker is affiliated any contribution made to him or on his behalf for fellowships, study tours, research grants, attendance at professional conferences, or the like. Similar disclosures should be made by the recipient.

Article 8. Persons employed by manufacturers and distributors

8.1 In systems of sales incentives for marketing personnel, the volume of sales of products within the scope of this Code should not be included in the calculation of bonuses, nor should quotas be set specifically for sales of these products. This should not be understood to prevent the payment of bonuses based on the overall sales by a company of other products marketed by it.

8.2 Personnel employed in marketing products within the scope of this Code should not, as part of their job responsibilities, perform educational functions in relation to pregnant women or mothers of infants and young children. This should not be understood as preventing such personnel from being used for other functions by the health care system at the request and with the written approval of the appropriate authority of the government concerned.

Article 9. Labelling

9.1 Labels should be designed to provide the necessary information about the appropriate use of the product, and so as not to discourage breast-feeding.

9.2 Manufacturers and distrubtors of infant formula should ensure that each container has a clear, conspicuous, and easily readable and understandable message printed on it, or on a label which cannot readily become separated from it, in an appropriate language, which includes all the following points:

(a) the words "Important Notice" or their equivalent;

(b) a statement of the superiority of breast-feeding;

(c) a statement that the product should be used only on the advice of a health worker as to the need for its use and the proper method of use;

(d) instructions for appropriate preparation, and a warning against the health hazards of inappropriate preparation. Neither the container nor the label should have pictures of infants, nor should they have other pictures or text which may idealize the use of infant forumla. They may, however, have graphics for illustrating methods of preparation. The terms "humanized", "maternalized" or similar terms should not be used. Inserts giving additional information about the product and its proper use, subject to the above conditions, may be included in the package or retail unit. When labels give instructions for modifying a product into infant formula, the above should apply.

9.3 Food products within the scope of this Code, marketed for infant feeding, which do not meet all the requirements of an infant formula, but which can be modified to do so, should carry on the label a warning that the unmodified product should not be the sole source of nourishment of an infant. Since sweetened condensed milk is not suitable for infant feeding, nor for use as a main ingredient of infant formula, its label should not contain purported instructions on how to modify it for that purpose.

9.4 The label of food products within the scope of this Code should also state all the following points: (a) the ingredients used; (b) the composition/analysis of the product; (c) the storage conditions required; and (d) the batch number and the date before which the product is to be consumed, taking into account the climatic and storage conditions of the country.

Article 10. Quality

10.1 The quality of products is an essential element for the protection of the health of infants and therefore should be of a high recognized standard.

10.2 Food products within the scope of this Code should,

when sold or otherwise distributed, meet applicable ISI standards.

Article 11. Implementation and monitoring

11.1 Government shall give effect to the principles and aim of this Code through legislation and other suitable measures. National policies and measures, including laws, which are adopted to give effect to the principles and aim of this Code, shall be publicly stated, and shall apply on the same basis to all those involved in the manufacture and marketing of products within the scope of this Code.

11.2 The manufacturers and distributors of products within the scope of this Code, and appropriate non-governmental organizations, professional groups, and consumer organisations are expected to collaborate with government in the implementation of this Code.

11.3 Independently of any other measures taken for implementation of this Code, manufacturers and distributors of products within the scope of this Code should regard themselves as responsible for monitoring their marketing practices according to the principles and aim of this Code, and for taking steps to ensure that their conduct at every level conforms to them.

11.4 Non-governmental organizations, professional groups, institutions, and individuals concerned should draw the attention of manufacturers or distributors to activities which are incompatible with the principles and aim of this Code, so that appropriate action can be taken. The appropriate governmental authority should also be informed.

11.5 Manufacturers and primary distributors of products within the scope of this Code should apprise each member of their marketing personnel of the Code and of their responsibilities under it.

A Format of a Seminar 90-5

COMMUNITY HEALTH CELL
47/1, (First Floor) St. Marks Road
BANGALORE - 560 001

41st Annual Convention of the Catholic Hospital Association of India

Workshop on: TOWARDS A PEOPLE-ORIENTED DRUG POLICY

23-25 November 1984 : St John's Medical College and Hospital

Objectives

WHAT IS THE PROBLEM

1. To create an awareness of
   a. the health situation in India
   b. the role of drugs in health care
   c. the pattern of drug production in India vis a vis the people's health needs
   d. the dynamics of the drug industry
   e. the patterns of drug distribution/availability in the health system
   f. the national drug policies and laws.
2. To create an awareness of the growing -
   a. irrational use
   b. over use
   c. misuse of drugs by health personnel
3. To look at the above issues within the context of the CHURCH HEALTH SERVICES
4. To try and understand the problem from the people's point of view.

HOW/WHY THE PROBLEM?

5. At the broader level to discover the social, economic, political, cultural and other factors responsible for this problem.
6. At personal level to discover how all of us are part of the problem atthe individual and the institutional levels.

WHAT TO DO TO TACKLE THE PROBLEM?

7. To consider the various responses at the national/international levels by groups/institutions/governments in the areas of -
   a. consumer awareness and people's movements
   b. continuing professional education
   c. pressure groups on policy makers

p.t.o...2

d. search for low cost alternatives
e. individual/group action
f. institutional policy changes

8. To discuss ways and means by which participants can respond to this problem at-

   a. individual
   b. institutional and
   c. regional/national levels

   and identify ways and means by which follow up action will be taken in this growing commitment.

PROGRAM	Preparatory Workshop for Faciliation Team
11.00 am	17th November 1984 St John's Medical College, Bangalore
11.00 am	Introduction of team/theme and details of the programme
11.20 am	Group discussion: a. What are the different dimensions of the drug policy and prescribing issues in India? b. What information would we like to have to further understand and analyse this problem?
12.40 p.m.	Plenary session: Listing out what we would like to know
1.00 p.m.	LUNCH
2.00 p.m.	Information check list
3.30 p.m.	Tea
4.00 p.m.	Planning the group discussion and the facilitation
5.00 p.m.	Video presentation on the theme.

DRUG ISSUES

Information check list

A. Drug Industry

- Output
- Type
- Structure
- Prices
- Research and Development
- Profits
- Pattern of production
- Drug Policy
- Quality control
- Consumption of Drugs

B. Drug Policy Issues (Problems)

- Plethora of formulations
- Brand names
- Fixed drug combinations
- Bio-availability argument
- Dumping
- Me-too drugs
- Drug controls
- Mark up
- Net worth returns
- Transfer pricing
- Sales promotion
- Samples
- Advertising

C. Drug Policy Issues (solving Problems)

- Essential drug list
- Generic prescribing
- Price control
- Labelling
- Low cost production
- Herbal gardens
- Physicians code
- Formulary (level of use)
- Bulk Drug formulation
- Bulk purchasing
- Quality control
- Cooperatives
- Pharmaceutical code
- Counter advertising
- Consumer Awareness

D. Drug Laws/Policies/Reports

- Drugs and cosmetics Act
- The Pharmacy Act
- Drugs & Magic Remedies Act
- Hathi Committee Report

p.t.o. 4

National Drug Policy	Drug Price Control Orders
Health for All Report	Govt. Ban of 22 drugs

E. <u>Irrational Drug use/prescribing</u> types

<u>Types</u>

Extravagant	Overprescribing
Incorrect	Multiple
Under-prescribing	

<u>Causes</u>

Inadequate basic training	Lack of continuing education
Lack of supervision	Inappropriate desire for prestige
Drug company sales promotion	Drug company misinformation
Heavy patient load	Patient presssure
Panic/fear induced prescription	Incorrect generalisations
Lack of patient awareness	Doctor-Drug producer axis

F. <u>Problem Drugs</u>

<u>Specific</u>

Analgin	Amidopyrin
Ancoloxin	Bromides
Chloral hydrate	Cloquinols
Dipyrone	E-P Forte
Ergot	Gripe water
Kaolin	Lomotil
Methapyrilene	Nialamide
Oxyphenbutazone	Phenylbutazone
Phenacetin	Practolol
Penicillin	Quinine
Sulphonamides	Strychnine
Yohembine	

pto 5

5

Groups

- Antibiotic combinations
- Analgesics
- Enzymes
- Placebos
- OTC Drugs
- Anabolic steroids
- Antidiarrhoeals
- Fixed dose combinations
- Steroids
- Unani/Ayurvedic drugs

G. Church Health Services (context)

- Institutional response
- Community response
- Holistic healing
- New vision/option
- Humanisation
- Issues of social justice

H. People's Point of view

- Availability
- Cost
- Mystique of injections
- Self prescribing
- Accessibility
- Cross-cultural conflicts
- Communication failures
- Low cost home remedies

I. Initiatives

- Meetings and workshops
- Books/journals
- Continuing education
- Signature campaign
- Public interest litigation
- Bulk/central purchasing
- Herbal gardens
- Newsletters/bulletins
- Professional awareness
- Consumer awareness
- Memorandum to policy makers
- Low cost drug production
- Cooperatives
- Formularies
- Codes

J. Case studies

- Bangladesh Ban
- Operation Medicine
- VHAI Cell
- Drug Action Network
- IOCU HAI
- Social Audit
- mfc Rational Drug Policy Cell
- Vincent's Case
- Ankuran
- KSSP
- Lok Vidnyan Sanghatana
- LOCOST
- Bangarapet Tablet Industry
- Kurji formulary
- State Forum (AP/WB)

ಇಂದಿನ ಚಿಕಿತ್ಸಾ ವಿಧಾನಗಳು ಮತ್ತು ಪರಿಣಾಮಗಳು.

ಅನಾದಿ ಕಾಲದಲೂ ಮಾನವ ಮತ್ತು ಔಷಧಿಗಳ ಸಂಬಂಧ ಅಭೇದ್ಯವಾಗಿದೆ. ಆದಿ ಮಾನವನ ಗುರಿ ಆಹಾರ ಮತ್ತು ಆಶ್ರಯವಾಗಿತ್ತು. ಪ್ರಕೃತಿದತ್ತವಾಗಿ ಬೆಳೆದುಬಂದ ವನಸ್ಪತಿಗಳು, ಹಣ್ಣು ಹಂಪಲು ಗಳು, ಗೆಡ್ಡೆ ಗೆಣಸುಗಳು, ತಿನ್ನುವುದರೊಂದಿಗೆ, ಕಾಡು ಪ್ರಾಣಿಗಳ ಮಾಂಸ ಹಾಗು ಮೀನುಗಳು ಅವರ ಆಹಾರವಾಗಿದ್ದು ಪ್ರಕೃತಿಗೆ ಹೊಂದಿಕೊಂಡು ಬದುಕುತ್ತಿದ್ದರೂ ಕೂಡ ಬಿರುಗಾಳಿ ಅತಿವೃಷ್ಟಿ ಅತಿ ಉಷ್ಣತೆ ಹಾಗೂ ಅತಿ ಶೈತ್ಯದಿಂದ ಪಾರಾಗಲು ಮರದ ನೆರಳುಗಳಲ್ಲಿ, ಗುಹೆಗಳಲ್ಲಿ ಆಶ್ರಯವನ್ನು ಪಡೆದಿದ್ದರು. ಆಹಾರಕ್ಕಾಗಿ ನಡೆಸಿದ ಹೋರಾಟದಲ್ಲಿ ಕಾಡುಮುಳ್ಳುಗಳು ಚುಚ್ಚಿ, ಕಾಡು ಪ್ರಾಣಿಗಳೊಂದಿಗೆ ಹೋರಾಡಿ ಅವರ ಶರೀರಗಳಲ್ಲಿ ಅನೇಕ ರೀತಿಯ ಗಾಯಗಳು ಉಂಟಾದವು. ಹವಾಮಾನದಲ್ಲಿ ಉಂಟಾದ ಬದಲಾವಣೆಗಳು ಅವರ ದೇಹದ ಶೀತೋಷ್ಣತೆಯಲ್ಲಿ ಪರಿಣಾಮ ಬೀರಿತು. ಗುಡುಗು —ಸಿಡಿಲು ಗಳು ಕಾಡು ಗಳು ಅವರ ದೇಹದಲ್ಲಿ ಸುಟ್ಟ ಗಾಯಗಳನ್ನು ಮಾಡಿತು. ಇಂತಹ ಪರಿಸ್ಥಿತಿಯಲ್ಲಿ ಅವರ ಶರೀರದಲ್ಲಿ ಉಂಟಾಗುತ್ತಿದ್ದ ನೋವು ಆಯಾಸಗಳು, ಆದಿ ಮಾನವನನ್ನು ಔಷಧಿಯ ಬಗ್ಗೆ ಚಿಂತಿಸುವಂತೆ ಮಾಡಿತು. ಪ್ರಕೃತಿಯಲ್ಲಿನ ಇತರೆ ಎಲ್ಲಾ ವಸ್ತುಗಳು ಮಾನವನ ಉಪಯೋಗಕ್ಕೆ ದೇವರು ಸೃಷ್ಟಿ ಮಾಡಿದ್ದಾನೆ. ಎಂಬ ನಂಬಿಕೆ ಅವರಲ್ಲಿ ಮೂಡಿತ್ತು. ಆಹಾರಕ್ಕೂ ಆಶ್ರಯಕ್ಕೂ ಪ್ರಕೃತಿಯನ್ನೇ ಅವಲಂಬಿಸಿದ ಆದಿ ಮಾನವ ಔಷಧಕ್ಕೂ ಪ್ರಕೃತಿಯನ್ನೇ ಅವಲಂಬಿಸಿದ ಗಿಡಗಳ ಎಲೆಗಳಲ್ಲಿ ಹೂಗಳಲ್ಲಿ ಕಾಯಿ ಗಳಲ್ಲಿ, ಬೇರುಗಳಲ್ಲಿ ಅವರು ಔಷಧಿಗಳನ್ನು ಕಂಡುಹಿಡಿದರು. ಪ್ರಾಣಿಗಳ ಮಾಂಸದಲ್ಲೂ ಕೊಬ್ಬಿನಲ್ಲೂ ಹಾಗು ಪಂಚಭೂತಗಳಲ್ಲಿ ಔಷಧಿಯ ಅಂಶ ಇರುವುದನ್ನು ಗಮನಿಸಿದರು.

ಗಿಡ ಮೂಲಿಕೆಗಳ ಪ್ರಯೋಗಗಳು:— ಒಂದು ರೋಗಕ್ಕೆ ಒಂದೇ ಎಲೆ, ಒಂದೇ ಹೂವು, ಒಂದೇ ಕಾಯಿ ಅಥವಾ ಒಂದು ಬೇರಿಗೆ ಪ್ರಾಧಾನ್ಯತೆ ಕೊಡುವುದು ಇಂದಿಗೂ ಕೂಡ ಗಿರಿಜನರ ಮಧ್ಯದಲ್ಲಿ ಪ್ರಚಾರದಲ್ಲಿ ಇರುವ ಔಷಧಿಗಳ ಬಗ್ಗೆ ತಿಳಿಯುವಾಗ ನಮಗೆ ಆಶ್ಚರ್ಯವಾಗಬಹುದು. ಗೃಹ ಪೀಡೆಗಳಿಂದ ಹಿಡಿದು, ಗರ್ಭ ನಿರೋಧಕಗಳವರೆಗೆ ಎಲ್ಲಾ ಚಿಕಿತ್ಸೆಗಳಿಗೂ ಗಿಡ ಮೂಲಿಕೆಗಳನ್ನು ಮಾತ್ರ ಯಶಸ್ವಿಯಾಗಿ ಬಳಸುತ್ತಾರೆ. ಜನಸಂಖ್ಯಾ ಸ್ಫೋಟನ ಎಂಬ ಮಹಾಮಾರಿಯನ್ನು ತಡೆಗಟ್ಟಲು ಕೋಟ್ಯಾಂತರ ಹಣವನ್ನು ಖರ್ಚು ಮಾಡಿ ಭಾರಿ ಪ್ರಯೋಗಗಳನ್ನು ಸಂಶೋಧನೆಗಳನ್ನು ನಡೆಸಿ ನಂತರ ಹೊರಗೆ ತರುವ ಔಷಧಗಳಿಂದ ಮನುಷ್ಯನ ದೇಹದಲ್ಲಿ ಉಂಟಾಗುವ ಭೀಕರ ಪರಿಣಾಮಗಳನ್ನು ಗಮನಿಸಿದಾಗ ಗಿಡ ಮೂಲಿಕೆ ಗಳನ್ನು ಉಪಯೋಗಿಸುವ ಗಿರಿಜನರ ಮುಂದೆ ಅಣುಯುಗದ ಆಧುನಿಕ ಶಾಸ್ತ್ರಜ್ಞರು ತಲೆತಗ್ಗಿಸಬೇಕು. ನೂರಾರು ವರ್ಷಗಳಿಂದ ಭಾರತೀಯರ ಕೈಯಲ್ಲಿ ಇರುವ ಇಂತಹ ಗಿಡ ಮೂಲಿಕೆಗಳ ಬಗ್ಗೆ ಸಂಶೋಧನೆ ನಡೆಸಲು ಅಧ್ಯಯನ ಮಾಡಲು ವಿದೇಶಗಳಿಂದ ಬರುವ ಜನರನ್ನು ನೋಡಿದಾಗ ಭಾರತೀಯರಾದ ನಾವು ಹೆಮ್ಮೆಪಡಬೇಕು.

ಪ್ರಕೃತಿಯಲ್ಲಿ ಉಂಟಾಗುತ್ತಿದ್ದ ವೈಶಿಷ್ಟ್ಯಗಳು ಮಾನವನ ಶರೀರದಲ್ಲಿ ಪರಿಣಾಮ ಬೀರುತ್ತಿದ್ದುದು ಪ್ರಕೃತಿಯ ಸಹಜ ಕ್ರಿಯೆಯಾದ ವಂಶವರ್ಧನವು ಕಾಲಕ್ಕೆ ತಕ್ಕಂತೆ ಯಥಾನುಸಾರವಾಗಿ ಬೆಳೆಯುತ್ತಿದ್ದಂಗ ಹೆಚ್ಚಿಗೆ ಶ್ರಮ ಪಡುವಂತೆ ದುಡಿಯಬೇಕೆಂಬ ಪ್ರೇರಣೆ ಉಂಟಾಯಿತು. ಅದು ಮನುಷ್ಯನನ್ನು ಹೆಚ್ಚಿಗೆ ಶ್ರಮಪಡುವಂತೆ ಮಾಡಿತು. ಹೀಗೆ ಮನುಷ್ಯನ ಶರೀರ ಶಕ್ತಿ ಹೆಚ್ಚುತ್ತಾ ಬಂತು.

ಹಿಂದೆ ಯಾವುದಾದರೂ ಒಂದು ರೋಗಕ್ಕೆ ತುತ್ತಾಗುತ್ತಿದ್ದ ಮನುಷ್ಯನಿಗೆ ಅನೇಕ ರೋಗಗಳು ಒಟ್ಟಿಗೆ ಬರಲು ಶುರುವಾಯಿತು.

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ಈ ಸಂದರ್ಭದಲ್ಲಿ ಒಂದಕ್ಕಿಂತ ಹೆಚ್ಚಿಗೆ ಔಷಧಗಳನ್ನು ಒಂದೇ ಸಮಯದಲ್ಲಿ ಒಬ್ಬ ಮನುಷ್ಯನ ಮೇಲೆ ಪ್ರಯೋಗಿಸಬೇಕಾಯಿತು. ಈ ರೀತಿ ಬೆಳೆದು ಬಂದ ಸಂಪ್ರದಾಯವೇ ಇಂದು ದೊರೆಯುತ್ತಿರುವ ಅಂಗಡಿ ಔಷಧಿಗಳು, ಕಾಡುಗಳಲ್ಲಿ ಗಿಡಮೂಲಿಕೆಗಳ ರೂಪದಲ್ಲಿ ದೊರೆಯುತ್ತಿದ್ದ ಔಷಧಗಳು ಇವತ್ತು ಡಬ್ಬಿಗಳಲ್ಲಿ ಸೀಸೆಗಳಲ್ಲಿ ತುಂಬುವ ವ್ಯಾಪಾರದ ವಸ್ತುವಾಗಿ ಮಾರ್ಪಟ್ಟಿದೆ.

<u>ಔಷಧಗಳು ಮತ್ತು ಚಿಕಿತ್ಸೆ</u> :— ಅನೇಕ ರೀತಿಯ ಚಿಕಿತ್ಸಾ ಕ್ರಮಗಳು ಇಂದು ಜಾರಿಯಲ್ಲಿ ಇದ್ದರೂ ಕೂಡ ಆಯುರ್ವೇದ, ಅಲೋಪತಿ, ಹೋಮಿಯೋಪತಿ ಇವು ಮೂರು ಮುಖ್ಯವಾದವು. ಆಯುರ್ವೇದದ ವಿಭಾಗಗಳಾದ ಮರ್ಮಾರ್ಣಿ, ಚಿಂತಾಮಣಿ ಪ್ರಕೃತಿ ಚಿಕಿತ್ಸೆ ಮೊದಲಾದವು ಜಾರಿಯಲ್ಲಿದೆ. ಇವೆಲ್ಲಕ್ಕಿಂತಲೂ ಶ್ರೇಷ್ಠವಾದ ಗಿಡ ಮೂಲಿಕೆಗಳ ಪ್ರಯೋಗವು ಬಹು ಹಿಂದಿನಿಂದಲೂ ಪ್ರಚಾರದಲ್ಲಿದೆ. ಅಂಬರ ಕಾಲದಿಂದ ಯುನಾನಿ ಚಿಕಿತ್ಸೆಯು ಪ್ರಚಾರಕ್ಕೆ ಬಂತು. ಆಯುರ್ವೇದ ಅಲೋಪತಿ, ಹೋಮಿಯೋಪತಿ ಇವು ಮೂರು ಸೇರಿದ ಹೆಬ್ರೋಕೆಮಿನರಲ್ಸ್ ಕೊನೆಯದಾಗಿ ಅಸ್ತಿತ್ವಕ್ಕೆ ಬಂದಿತು. ಆಧುನಿಕ ರೀತಿಯ ಅಕ್ಯೂಪಂಚರ್ ರೀತಿಯು ಚೀನಾದವರ ಕೊಡುಗೆ.

<u>ಆಯುರ್ವೇದ</u> :— ರೋಗಕ್ಕೆ ಚಿಕಿತ್ಸೆಯನ್ನು ಮಾಡದೆ ರೋಗಿಗೆ ಚಿಕಿತ್ಸೆಯನ್ನು ನೀಡುವ ಕ್ರಮವೆ ಆಯುರ್ವೇದ. ಔಷಧಗಳಿಗೆ ರಸ ಪರಿವರ್ತನೆ ಉಂಟು ಮಾಡಿ ಅವುಗಳನ್ನು ನಿಜವಾದ ರೂಪದಲ್ಲಿ ಸಂಯೋಜಿಸಿ ಅಷ್ಟಚಜ, ತೈಲಗಳು, ಕಷಾಯಗಳು, ಮಾತ್ರೆಗಳು, ಚೂರ್ಣಗಳು ಮತ್ತು ಲೇಹ್ಯಗಳ ರೂಪದಲ್ಲಿ ಪ್ರಯೋಗಿಸಲಾಗುತ್ತದೆ. ಪಂಚೇಂದ್ರಿಯಗಳು ಶರೀರವನ್ನು ಕಾಪಾಡುವ ವಾತ, ಪಿತ್ತ, ಕಫಾದಿಗಳಲ್ಲಿ ಉಂಟಾಗುವ ಏರುಪೇರುಗಳೇ ರೋಗಕ್ಕೆ ಮೂಲ ಕಾರಣ. ಆದ್ದರಿಂದ ಅವುಗಳ ಸರಿಯಾದ ರೀತಿಯ ಕ್ರಮೀಕರಣವೇ ರೋಗ ಶಾಂತಿ ಎಂಬ ತತ್ವದ ಮೇಲೇ ಅಳವಡಿರುವ ಚಿಕಿತ್ಸಾ ಕ್ರಮಕ್ಕೆ ಆಯುರ್ವೇದ ಎಂದು ಕರೆಯುತ್ತಾರೆ.

ಆದಿ ಮಾನವನ ವಿಕಾಸಕ್ಕೆ ಅನುಸಾರವಾಗಿ ಔಷಧ ವಿಜ್ಞಾನವೂ ಬೆಳವಣಿಗೆಯಾಯಿತು. ಶಿಲಾಯುಗದ ಮಾನವ ನಾಣ್ಯಯುಗಕ್ಕೆ ಬರುವಷ್ಟರಲ್ಲಿ ಔಷಧ ವಿಜ್ಞಾನದ ಉನ್ನತ ಶಿಖರವನ್ನು ಭಾರತೀಯರು ಏರಿದ್ದರು. ಗಿಡ ಮೂಲಿಕೆಗಳಿಂದ ಶಸ್ತ್ರ ಚಿಕಿತ್ಸೆಯವರೆಗೆ ವೈದ್ಯಶಾಸ್ತ್ರವನ್ನು ಬೆಳೆಸಿದ ಋಷಿಶ್ರೇಷ್ಠರು ತ್ಯಾಗದ ತಪಸ್ಸಿನ ಮುಂದೆ ನಾವುಗಳು ಕೈ ಮುಗಿಯಬೇಕು.

ತಮಗೆ ದೈವದತ್ತವಾಗಿ ಸಿಕ್ಕಿದ ಚಿಕಿತ್ಸಾ ಜ್ಞಾನವನ್ನು ಸಹ ಜೀವಿಗಳ ಒಳಿತಿಗಾಗಿ ವಿನಿಯೋಗಿಸುವುದು ದೇವರ ಸೇವೆಯೆಂದು ಭಾರತದ ಆಚಾರ್ಯರು ತಿಳಿದಿದ್ದರು. ವೈದ್ಯರು ಎಂಬ ಹೆಸರಿನಲ್ಲಿ ಇವರುಗಳು ಗ್ರಾಮಗಳಲ್ಲಿ ಸಂಚರಿಸಿ ರೋಗಿಗಳಿಗೆ ಚಿಕಿತ್ಸೆಯನ್ನು ನೀಡುವುದು ತಮ್ಮ ಕರ್ತವ್ಯವೆಂದು ತಿಳಿದಿದ್ದರು. ಪ್ರತಿಫಲಾಪೇಕ್ಷೆ ಇಲ್ಲದೆ ನಡೆಸುತ್ತಿದ್ದ ಈ ಕೆಲಸದಲ್ಲಿ ರೋಗಿಗಳಲ್ಲಿ ಬಡವರು ಶ್ರೀಮಂತರು ಎಂಬ ಭೇದಭಾವ ಇರಲಿಲ್ಲ. ಸಮಾಜದಲ್ಲಿ ಗೌರವ ಸ್ಥಾನವನ್ನು ಅಲಂಕರಿಸಿದ್ದ ಇವರ ಕೆಲಸವು ಹಣ ಸಂಪಾದನೆ ಒಂದು ಮಾರ್ಗವಾಗಿರಲಿಲ್ಲ.

<u>ಅಲೋಪತಿ</u> :— ಅಲೋಪತಿ ಸಂಪ್ರದಾಯವು ರೋಗಿಗೆ ಚಿಕಿತ್ಸೆಯನ್ನು ನೀಡದೆ ರೋಗಕ್ಕೆ ಚಿಕಿತ್ಸೆಯನ್ನು ನೀಡುತ್ತದೆ. ಔಷಧಗಳನ್ನು ರಸಾಯನಕ್ರಿಯೆಗೆ ಒಳಪಡಿಸಿ ಬೇರೆ ಬೇರೆ ರೋಗಕ್ಕೆ ತಕ್ಕಂತೆ ಔಷಧಗಳನ್ನು ತಯಾರಿಸಿ ವಿವಿಧ ರೂಪದಲ್ಲಿ ಟಾನಿಕ್ ಮಾತ್ರೆಗಳನ್ನು ಕೊಡುವುದು. ಚುಚ್ಚು ಮದ್ದಿನ ಮುಖಾಂತರ ಔಷಧಗಳನ್ನು ನೇರವಾಗಿ ರಕ್ತಕ್ಕೆ ಸೇರಿಸುವುದು. ಎಕ್ಸ್‌ರೆ ಮುಖಾಂತರ ಶರೀರದ ಒಳಗಿನ ಖಾಯಿಲೆಗಳನ್ನು ಕಂಡುಹಿಡಿದು ಶಸ್ತ್ರ ಕ್ರಿಯೆಯ ಮುಖಾಂತರ ಅಂಗಗಳನ್ನು ಹೊರತೆಗೆಯುವುದು ಬೇರೆ ಅಂಗಾಂಗಗಳನ್ನು ಜೋಡಿಸಲು ಶಕ್ತವಾದ ಈ ಚಿಕಿತ್ಸಾ ಸಂಪ್ರದಾಯಕ್ಕೆ ಅಲೋಪತಿ ಎಂದು ಕರೆಯುತ್ತಾರೆ. ಇಂದು ಅತಿ ಹೆಚ್ಚು ಪ್ರಚಾರದಲ್ಲಿರುವ ಚಿಕಿತ್ಸಾ ವಿಧಾನವು ಇದೇ ಆಗಿದೆ. ನಿರಂತರ ವಾದ ಪ್ರಯೋಗಗಳನ್ನು ನಡೆಸುತ್ತಿರುವ ಈ ಶಾಸ್ತ್ರವು ಎಲ್ಲಿಯವರೆಗೆ ಬೆಳವಣಿಗೆಯಾಗುತ್ತದೆ ಎಂದು ಹೇಳಲು **ಅಸಾಧ್ಯವಾಗಿದೆ.**

ಭಾರತೀಯ ಸಂಸ್ಕೃತಿಯು ಅನೇಕ ಬೇರೆ ಬೇರೆ ದೇಶದವರನ್ನು ಇಲ್ಲಿಗೆ ಆಕರ್ಷಿಸುವುದರೊಂದಿಗೆ ಬೇರೆ ದೇಶಗಳ ಅಶಿಯೇ ವೈದ್ಯಶಾಸ್ತ್ರದಲ್ಲಿ ನಾವು ಗಳಿಸಿರುವ ಅಭಿವೃದ್ಧಿಯನ್ನು ಇತರೆ ರಾಷ್ಟ್ರಗಳು ಅನುಸರಿಸುವಂತೆ ಆಗಿದೆ.

ವ್ಯಾಪಾರಕ್ಕಾಗಿ, ಏನೋ ಒಂದಕ್ಕಾಗಿ ನಮ್ಮ ದೇಶಕ್ಕೆ ಬಂದವರೆಲ್ಲಾ ನಮ್ಮ ದೇಶದ ಆಯುರ್ವೇದ ಚಿಕಿತ್ಸಾ ವಿಧಾನವನ್ನು ಅನುಕರಿಸುವುದಲ್ಲದೇ ಅಪಹರಿಸಿಕೊಂಡು ಹೋದರು. ಭಾಷೆ, ಸಂಸ್ಕೃತಿಗಳು ಅವಕ್ಕೆ ಎಡರೊದವಾಗಲಿಲ್ಲ. ಆದರೆ ವಿದೇಶೀಯರು ವೈದ್ಯಶಾಸ್ತ್ರಕ್ಕೆ ಕೈ ಹಾಕಿದ ಮೇಲೆ ಔಷಧಿಗಳು ಕೂಡ ಬರಿ ವ್ಯಾಪಾರದ ವಸ್ತುಗಳಾಗಿ ಮಾರ್ಪಾಟಾದವು. ಅಸಂಸ್ಕೃತ ವಸ್ತುಗಳಾದ ಔಷಧಿಗಳನ್ನು ರಸಪರಿವರ್ತನೆ ಮಾಡಿ ಟಾನಿಕ್‌ಗಳು, ಮಾತ್ರೆಗಳು, ಆಯಿಂಟ್‌ಮೆಂಟುಗಳು ಹೊರಗೆ ಬಂದಾಗ ಔಷಧಿಗಳ ಗುಣಮಟ್ಟ ಕಡಿಮೆಯಾಗುವುದರೊಂದಿಗೆ ಸಾವಿರಪಟ್ಟು ಬೆಲೆಯು ಹೆಚ್ಚಾಯಿತು.

ಔಷಧಿಯನ್ನು ಕಂಡುಹಿಡಿದವರ ಪ್ರತಿಫಲದ ಹೆಸರು ಪ್ರಯೋಗಿಸುವ ಪಾರಿತೋಷಕವು ಸೇರಿ ಎಷ್ಟು ಹಂತದಲ್ಲಿ ಆಗುವ ಖರ್ಚಿನ ಹೊರಗೆ ಉತ್ಪಾದಿಸುವ ಕಂಪನಿಯ ಲಾಭ ಸೇರಿದರೆ ಒಂದು ಪೈಸೆ ಮೌಲ್ಯಧಿರೆಯು ಅದಸನಕ್ಕೆ ಐವತ್ತರಿಂದ ನೂರು ರೂಪಾಯಿಗಳ ವರೆಗೆ ಬೆಲೆಯಾಗುತ್ತದೆ. ಆದರೂ ಅಲ್ಲಿ ಸಾವಿರದ ಒಂದು ಅಂಶ ಗುಣವು ಇರುವುದಿಲ್ಲ. ಅದು ಅಲ್ಲದೆ ಪರಿಣಾಮ ಪ್ರಕ್ರಿಯೆಗೆ ಒಳಗಾದ ರಸವಸ್ತುಗಳು ಪ್ರತಿಕ್ರಿಯೆಗೂ ರೋಗಿ ಗುರಿಯಾಗುತ್ತಾನೆ. ಔಷಧ ಒಂದು ವ್ಯಾಪಾರ ಎಂಬ ತತ್ವವನ್ನು ಒಳಗೊಂಡ ವ್ಯಾಪಾರಿ ಕಂಪನಿಗಳು ಹೊರಗೆ ತರುವ ಔಷಧಗಳು ಮನುಷ್ಯ ಶರೀರದಲ್ಲಿ ಉಂಟುಮಾಡುವ ಅನಾಹುತಗಳು ಏನೇ ಆಗಿದ್ದರೂ ಇಂದಿನ ಜನಾಂಗ ಅಲೋಪತಿಯಲ್ಲಿ ಸಂಪೂರ್ಣವಾಗಿ ಅವಲಂಬಿತರಾಗಿದ್ದಾರೆ. ಎಡಬಿಡದೆ ಸಮಯದಲ್ಲಿ [illegible] ಮನುಷ್ಯನ ಬದುಕಿನ ಮುಖ್ಯ ವೈದ್ಯರನ್ನು ಕಂಡು ಔಷಧಿಯನ್ನು ಬರೆದು ಔಷಧಂಗಡಿಗಳನ್ನು ಹುಡುಕಿ ಕಿತ್ತು ತಂದು ಕಷಾಯ ಮಾಡಲು ಮಾತ್ರೆಗಳನ್ನು ತಯಾರು ಮಾಡಲು ಪಥ್ಯವನ್ನು ಮಾಡಲು ಸಮಯ ಎಲ್ಲಿದೆ ಕಾರಣ ಬಂದದ್ದಕ್ಕೆ ತಕ್ಷಣ ಪರಿಹಾರವಾಗುವ '' ರೆಡಿ [illegible] ಚಿಕಿತ್ಸಾ ವಿಧಾನವನ್ನು ಆಶ್ರಯಿಸಬೇಕಾಯಿತು.

ಡಾಕ್ಟರರ ವೇಷ ವಿಧಾನದಿಂದ ಹಿಡಿದು ರೋಗಿಯನ್ನು ಪರಿಚಯಿಸುವ ಆಕರ್ಷಣೀಯವಾದ ರೀತಿಯು ರೋಗಿಗೆ ಮಾನಸಿಕ ಹಿತವನ್ನುಂಟು ಮಾಡುತ್ತದೆ. ವಿದೇಶೀಯರನ್ನು ಅನುಕರಿಸುವ ಭ್ರಮೆ ಹಾಗೂ ವಿದೇಶೀಯರ ಮೇಲಿನ ಪ್ರೇಮ ಜನರನ್ನು ಮರುಳು ಮಾಡಿದೆ. ನಗರ ಪ್ರದೇಶಗಳಲ್ಲಿ ಕಾಣುವ ಸಾವಿರಾರು ಔಷಧಿ ಅಂಗಡಿಗಳು ಹಾಗೂ ಪರಸ್ಪರ ಸ್ಪರ್ಧೆ ನಡೆಸುವ ನರ್ಸಿಂಗ್ ಹೋಂಗಳು ಹಾಗೂ ಔಷಧ ಒಂದು ವ್ಯಾಪಾರವಾಗಿ ಔಷಧಗಳ ಬಗ್ಗೆ ಮಾತ್ರವಲ್ಲ, ಆಸ್ಪತ್ರೆಗಳಲ್ಲಿ ಕೆಲಸ ಮಾಡುತ್ತಿರುವ ಡಾಕ್ಟರುಗಳು ವಿದೇಶಿ ಡಿಗ್ರಿಗಳ ಉದ್ದನೆಯ ಪಟ್ಟಿಯು ಸೇರಿದಂತೆ ಪತ್ರಿಕೆಗಳ ಹೆಚ್ಚಿನ ಭಾಗವನ್ನು ಆಕ್ರಮಿಸಿದೆ. ಗ್ರಾಹಕರ ಮನಃಶಾಸ್ತ್ರವನ್ನು ಅಂತ ವ್ಯಾಪಾರಸ್ಥರು ಇನ್ನು ಏನೆಲ್ಲಾ ಮಾಡುತ್ತಾರೆ ಎಂದು ಹೇಳಲಿಕ್ಕೆ ಸಾಧ್ಯವಿಲ್ಲ.

ಆಯುರ್ವೇದದಿಂದ ಅಲೋಪತಿಗೆ ಹರಿಯುತ್ತಿರುವ ಈ ಪ್ರವಾಹದ ಹಿಂದೆ ಇನ್ನು ಅನೇಕ ಸಮಸ್ಯೆಗಳಿವೆ. ಅಧುನಿಕ ಗೊತ್ತು ಗುರಿಯಿಲ್ಲದೆ ವನಸಂಪತ್ತನ್ನು ನಾಶಮಾಡುವುದರಿಂದ ಅನೇಕ ಅಮೂಲ್ಯವಾದ ಗಿಡ ಮರಗಳು ನಾಶವಾದವು. ಇರುವುದನ್ನು ಸಂಗ್ರಹಿಸಿ ಸಂಸ್ಕರಿಸಲು ಬೇಕಾಗುವ ಖರ್ಚು ಜನ ಸಾಮಾನ್ಯರಿಗೆ ಭಾರವಾಯಿತು. ರಾಜರುಗಳ ನಿರ್ಗಮನದೊಂದಿಗೆ ವೈದ್ಯರುಗಳ ಸ್ಥಾನಮಾನಗಳು ನಷ್ಟವಾಯಿತು. ಅದರೊಂದಿಗೆ ವೈದ್ಯವು ಜೀವನೋಪಾಯವಾಗಿ ಮಾರ್ಪಾಡಾಯಿತು. ಹಿಂದಿನ ಪ್ರಾಮಾಣಿಕತೆ ಸ್ಥಾನದಲ್ಲಿ ಸ್ವಾರ್ಥತೆ ಹೆಡೆಯೆತ್ತಿನಿಂತಾಗ ಅದರಿಂದ ಎಲ್ಲಾ ಕೆಟ್ಟ ಗುಣಗಳು ಸೇರಿಕೊಂಡು ಹಿಂದಿನ ಪಾರಂಪರ್ಯವೈದ್ಯವು ವಿನಾಶದ ಹಾದಿಯನ್ನು ಹಿಡಿಯಿತು. [illegible] ವೈದ್ಯರ ಪ್ರವೇಶವು ಆಯುರ್ವೇದ ಚಿಕಿತ್ಸೆಯ ನಾಶಕ್ಕೆ ಇನ್ನೊಂದು ಕಾರಣವಾಯಿತು.

<u>ಹೋಮಿಯೋಪತಿ</u>:— ಅಲೋಪತಿ ಚಿಕಿತ್ಸಾ ವೈದ್ಯರಾದ ಶ್ರೀ ಹನಿಮಾನರವರ ದೀರ್ಘ ಕಾಲದ ಪರೀಕ್ಷಣೆ ನಿರೀಕ್ಷಣೆಗಳ ಫಲವಾಗಿ ಹೋಮಿಯೋಪತಿ ಎಂಬ ಚಿಕಿತ್ಸಾ ಸಂಪ್ರದಾಯವು ಜಾಗೆಗೆ ಬಂದಿತು. ಆಯುರ್ವೇದದ ಹಾಗೆ ರೋಗಕ್ಕೆ ಚಿಕಿತ್ಸೆಯನ್ನು ಮಾಡದೆ ರೋಗಿಗೆ ಚಿಕಿತ್ಸೆಯನ್ನು ಮಾಡುವ ವಿಧಾನವನ್ನು ಹೋಮಿಯೋಪತಿಯು ಅನುಸರಿಸುತ್ತದೆ.

ಔಷಧಗಳನ್ನು ಪ್ರಯೋಗಶಾಲೆಯಲ್ಲಿ ಅನೇಕಸಲ ಶುದ್ಧೀಕರಿಸಿ ವೀರ್ಯವನ್ನು ಹೆಚ್ಚಿಸಿ ರೋಗಿಗಳ ಮೇಲೆ ಪ್ರಯೋಗಿಸುವುದು. ಈ ಔಷಧಗಳು ರೋಗಿಯ ಮೇಲೆ ಬೇಗನೆ ಪರಿಣಾಮವನ್ನುಂಟು ಮಾಡುತ್ತದೆ. ತುಂಬಾ ಖರ್ಚು ಕಡಿಮೆಯ ಚಿಕಿತ್ಸಾ ಸಂಪ್ರದಾಯವಾಗಿದ್ದು ಉಪಯೋಗಕಾರಿಯಾಗಿದೆ. ಆದರೆ ಇದು ಮಾಡ ಗೊತ್ತಿಲ್ಲದವರ ಲಾಭಕೋರರ ಕೈಗೆ ಸಿಕ್ಕಿ ನಾಶವಾಗುತ್ತಿದೆ. ಅದೂ ಅಲ್ಲದೆ ಅಲೋಪತಿಯ ಅತಿ ಪ್ರಸರಣವು ಇದರ ಅವನತಿಗೆ ಕಾರಣವಾಗಿದೆ.

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<u>ಮರ್ಮಾಣ</u> :— ಆಯುರ್ವೇದದಲ್ಲಿ ಅಡಕವಾದ ಈ ಚಿಕಿತ್ಸಾ ವಿಧಾನವು ಮನುಷ್ಯ ಶರೀರದ ಮರ್ಮಗಳನ್ನು ಆಧಾರವಾಗಿಟ್ಟುಕೊಂಡು ಚಿಕಿತ್ಸೆ ಮಾಡುವ ವಿಧಾನವಾಗಿದೆ. ಉಳುಕು, ಚುಚ್ಚು ಮುಂತಾದುವುಗಳಿಗೆ ಈ ಚಿಕಿತ್ಸೆ ಪ್ರಯೋಜನಕಾರಿಯಾಗಿದೆ.

<u>ಚಿಂತಾಮಣಿ</u> :— ಇದಕ್ಕೆ ತಮಿಳುನಾಡಿನಲ್ಲಿ ತುಂಬಾ ಪ್ರಚಾರವಿದೆ. ಅಗಸ್ತ್ಯರ್ ಎಂಬುವರು ಇದರ ಜನಕರು. ಔಷಧಿಗಳಿಂದ ಮಾಡಿದ ಭಸ್ಮಗಳು, ಚೂರ್ಣಗಳನ್ನು ಹೆಚ್ಚಾಗಿ ಉಪಯೋಗಿಸುತ್ತಾರೆ.

<u>ಪ್ರಕೃತಿ ಚಿಕಿತ್ಸೆ</u> :— ಪಂಚೇಂದ್ರಿಯಗಳಿಂದ ಕೂಡಿದ ಮನುಷ್ಯನ ಶರೀರಕ್ಕೆ ಪಂಚಭೂತಗಳಿಂದ ಚಿಕಿತ್ಸೆಯನ್ನು ನೀಡುವ ವಿಧಾನಕ್ಕೆ ಪ್ರಕೃತಿ ಚಿಕಿತ್ಸೆ ಎಂದು ಕರೆಯುತ್ತಾರೆ. ನೀರಿನಲ್ಲಿ ಕೂರುವುದು ಮೈಗೆ ಮಣ್ಣನ್ನು ಲೇಪಿಸುವುದು, ಎಲ್ಲಾ ಇದರ ಚಿಕಿತ್ಸಾ ವಿಧಾನಗಳು. ಸನುನಿ ಉಪ್ಪಿಗಳ ಸನ್ ಬಾತ್ ಕೂಡ ಇದರ ಒಂದು ಭಾಗವಾಗಿದೆ.

<u>ಯುನಾನಿ</u> :— ಅರಬ್ಬರ ಕಾಲದಲ್ಲಿ ಇದಕ್ಕೆ ಭಾರತದಲ್ಲಿ ಪ್ರಚಾರ ಲಭಿಸಿತು. ಗಲ್ಫಿನ ಪ್ರಚಾರಕ್ಕೆ ಬಂದ ಈ ಚಿಕಿತ್ಸಾ ವಿಧಾನವು ಈಗ ಪುನರುಜ್ಜೀವಿಸಲು ಪ್ರಯತ್ನ ನಡೆಯುತ್ತಿದೆ.

<u>ಹೆರ್ಬೋಮಿನರಲ್ಸ್</u> :— ಆಯುರ್ವೇದ, ಅಲೋಪತಿ ಮತ್ತು ಹೋಮಿಯೋಪತಿಗಳನ್ನು ಸಂಯೋಜಿಸಿ ನಡೆಸುವ ಈ ಚಿಕಿತ್ಸಾ ವಿಧಾನವು 1981ರಲ್ಲಿ ಹೈದರಾಬಾದಿನಲ್ಲಿ ಪ್ರಾರಂಭವಾಯಿತು. ರೋಗ ಶಮನ ಹಾಗೂ ರೋಗ ನಿವಾರಣೆಗೆ ಸ್ಫೂರ್ತಿಯನ್ನು ಕೊಡುವ ಈ ವಿಧಾನವು ಜನ ಸಾಮಾನ್ಯರಿಗೆ ಕಡಿಮೆ ವೆಚ್ಚದಲ್ಲಿ ಔಷಧಿಗಳನ್ನು ಲಭಿಸುವಂತೆ ಮಾಡುವುದೇ ಇದರ ಮುಖ್ಯ ಗುರಿ.

<u>ಗಿಡ ಮೂಲಿಕೆಗಳು</u> :— ಮನುಷ್ಯನು ಹುಟ್ಟಿದ ಮೊದಲು ಕಂಡು ಹಿಡಿದ ಗಿಡ ಮೂಲಿಕೆಗಳು ಈಗಲೂ ಕೂಡ ವೈಜ್ಞಾನಿಕ ಯುಗದ ಬೆಳವಣಿಗೆಗೆ ಗುರಿಯಾಗದೆ ತನ್ನದೇ ಆದ ವೈಶಿಷ್ಟ್ಯವನ್ನು ಬೆಳೆಸಿಕೊಂಡಿದೆ. ಔಷಧಿಗಳಿಗೆ ರಸ ಪರಿವರ್ತನೆಯನ್ನು ಮಾಡದೆ ಮಿಶ್ರಣಗಳನ್ನು ನೇರವಾಗಿ ಉಪಯೋಗಿಸುವುದೇ ಗಿಡಮೂಲಿಕೆಗಳ ವಿಶೇಷತೆ. ಬೇರೆ ಬೇರೆ ರೋಗಗಳಿಗೆ ಅವುಗಳಿಗೆ ತಕ್ಕನಾದ ಔಷಧಿಗಳನ್ನು ಮಾತ್ರ ಉಪಯೋಗಿಸುವುದು. ಸಾಧಾರಣವಾಗಿ ಮತ್ತೊಮ್ಮೆ ಉಪಯೋಗಿಸುವ ಅವಶ್ಯಕತೆ ಇರುವುದಿಲ್ಲ. ಎಂಬುದು ಗಿಡ ಮೂಲಿಕೆಗಳ ಮತ್ತೊಂದು ವಿಶೇಷ. ಆಯುರ್ವೇದದಲ್ಲಿ ಅತಿಪತವಾಗಿರುವ ಗಿಡ ಮೂಲಿಕೆ ಪ್ರಯೋಗಗಳಿಗೆ ಪ್ರತ್ಯೇಕವಾದ ಯಾವುದೇ ತತ್ವ ಸಂಹಿತೆ ಇರುವುದಿಲ್ಲ. ಅಪೂರ್ವ ಕೆಲವು ಜನರ ಕೈಗಳಲ್ಲಿ ಅಥವ ಅಪೂರ್ವ ಕೆಲವು ಗ್ರಂಥಗಳಲ್ಲಿ ಅಡಗಿರುವ ಗಿಡ ಮೂಲಿಕೆ ಪ್ರಯೋಗಗಳು ಕಡಿಮೆ ವೆಚ್ಚದಲ್ಲಿ ಹಾಗೂ ಬೇಗನೆ ಉಪಯೋಗಿಸಲು ಸಾಧ್ಯತೆ ಇರುವುದರಿಂದ ತುಂಬಾ ಸಮಯವನ್ನು ಉಳಿಸುತ್ತದೆ. ಹೆಚ್ಚಿಗೆ ಪ್ರಚಾರದಲ್ಲಿ ಇಲ್ಲದೆ ಇದ್ದರೂ ವ್ಯಭಿಚರಿಸಲ್ಲ ಎಂದು ಹೇಳಬಹುದು.

ನಮ್ಮ ದೇಶದಲ್ಲಿ ಒಟ್ಟಾರೆ ಕಂಡುಬರುವ ಚಿಕಿತ್ಸಾ ವಿಧಾನಗಳ ಸಂಕ್ಷಿಪ್ತ ವಿವರಣೆಯನ್ನು ಮೇಲೆ ಕೊಟ್ಟಿದೆ. ಪರಿಸರದ ಸೃಷ್ಟಿಯಾದ ಮನುಷ್ಯ ಕಾಲ ಚಕ್ರಕ್ಕೆ ಅನುಸಾರವಾಗಿ ಮುಂದಕ್ಕೆ ಹೋಗುತ್ತಿದ್ದರೂ ಎಷ್ಟೇ ವೈಜ್ಞಾನಿಕವಾಗಿ ಮುಂದುವರಿದಿದ್ದರೂ ಕೂಡ ಹಿಂದಿನವರ ಕೈ ಚಳಕದ ಕೃತಿಗಳನ್ನು ತಾಳೆ ಮಾಡುವುದು ಕಷ್ಟವಾಗುತ್ತದೆ ಎಂದು ಅವನಿಗೆ ಈಗ ಅನಿಸುತ್ತದೆ. ಅದರಲ್ಲೂ ಔಷಧಿಗಳ ವಿಷಯದಲ್ಲಿ ಈ ಮಾತು ತುಂಬಾ ಸತ್ಯವಾಗಿದೆ.

ಹಿಂದಿನ ಕಾಲದ ವೈದ್ಯರ ಸ್ಥಾನದಲ್ಲಿ ಡಾಕ್ಟರುಗಳು ಬಂದರು. ಅವರು ಇರುವ ಜಾಗವು ಆಸ್ಪತ್ರೆಗಳಾದವು. ಮನೆಗಳಲ್ಲಿ ಮಲಗುತ್ತಿದ್ದ ರೋಗಿಗಳು ನರ್ಸಿಂಗ್ ಹೋಂಗಳಿಗೆ ವರ್ಗಾಯಿಸಲ್ಪಟ್ಟರು. ರೋಗಿಗಳನ್ನು ಪರಿಚರಿಸುತ್ತಿದ್ದ ಸಂಬಂಧಿಕರ ಸ್ಥಾನದಲ್ಲಿ ಬಾಡಿಗೆ ಜನರು ಹುಟ್ಟಿಕೊಂಡರು. ವೈದ್ಯರ ಗುಳಿಗೆ ಇದ್ದ ಪೆಟ್ಟಿಗೆಯ ಸ್ಥಾನದಲ್ಲಿ ಮೆಡಿಕಲ್ ಸ್ಟೋರುಗಳು ಹುಟ್ಟಿಕೊಂಡವು. ಹೀಗೆ ರೋಗಿ, ವೈದ್ಯ ಪರಿಚಾರಕರು ಎಂಬ ಹಳೆಯ ಸಂಪ್ರದಾಯಗಳಿಂದ ನಾವು ಬಹು ದೂರ ಪ್ರಯಾಣ ಮಾಡಿ ಮತ್ತೆ ಎಲ್ಲಿಯೋ ಎಡವಿದ್ದೇವೆ. ಎಂದು ತಿಳಿದಾಗ ಹಿಂದಕ್ಕೆ ತಿರುಗಿ ನೋಡಿದಾಗ ಇಂದು ಔಷಧ ಒಂದು ವ್ಯಾಪಾರವಾಗಿದೆ. ಡಾಕ್ಟರ ಮತ್ತು ರೋಗಿಯ ಸಂಬಂಧ ವಣಿಕೋದ್ಯಮಸ್ಥರ ಮಾತ್ರ. ಸಹಾನುಭೂತಿ, ಅನುಕಂಪ ಪ್ರೀತಿ-ವಿಶ್ವಾಸಗಳು ಕೇವಲ ವ್ಯಾಪಾರದ ನೀತಿಗಳಾಗಿವೆ. ರೋಗಿಗಳು ಈ ಉದ್ಯಮದ ಮುಖ್ಯ ಕಚ್ಚಾವಸ್ತುಗಳಾಗಿವೆ. ಅದರೊಂದಿಗೆ ಪರಸ್ಪರ ಪ್ರೀತಿ ವಿಶ್ವಾಸಗಳು ನಷ್ಟವಾಗಿದೆ. ಧಾರ್ಮಿಕತೆಯು ಕೇವಲ ಹಿಂದಿನ ಮನುಷ್ಯರ ಗಾದೆಯ ಮಾತುಗಳಾಗಿವೆ.

ಬಾಹ್ಯಕಾಶದಲ್ಲಿ ಸಂಚರಿಸುತ್ತಿರುವ ಮಾನವ ಭೂಮಿ ತಾಯಿಯ ಮಡಿಲಿಗೆ ಇಳಿಯ ಬಯಸಿ ಮನಸನ್ನು ಮಾಡುವುದರೊಂದಿಗೆ ಚಿಕಿತ್ಸೆಯ ನಿರ್ವಹಣೆ ಪಾಠ ಒಂದು ವರದಿಯು, ವೈದ್ಯ ರ ತಿಳುವಳಿಕೊಂಡರೆ ಮಾತ್ರ ನಮಗೆ ಸ್ಪಷ್ಟವಾಗಿರುವುದನ್ನು ಪುನಃ ಪಡೆಯಲು ಸಾಧ್ಯ. ಚಿಕಿತ್ಸೆ ಮತ್ತು ಔಷಧ ನಿರ್ಮಾಣವು ಲಾಭದಾಯಕ ಒಂದು ಉದ್ದಿಮೆಯಾಗಿ ಮಾರ್ಪಾಡಾಗಿರುವ ಈ ಕಾಲದಲ್ಲಿ ಈ ಉದ್ದಿಮೆಯ ಒಂದು ಘಟಕವಾಗಿ ಮಾರ್ಪಟ್ಟಿರುವ ಜನ ಸಾಮಾನ್ಯರಿಗೆ ಸ್ವಲ್ಪವಾದರೂ ಆಶ್ವಾಸನೆಯನ್ನು ನೀಡುವ ಮಾರ್ಗವನ್ನು ಕಂಡುಹಿಡಿಯುವುದು ಮುಖ್ಯ ಸಮಸ್ಯೆಯಾಗಿದೆ. ಕೆಲವು ಪರಿಹಾರ ಮಾರ್ಗಗಳನ್ನು ಕೆಳಗೆ ಕೊಟ್ಟಿದೆ.

ಆರೋಗ್ಯ — ವ್ಯಾಖ್ಯಾನ :— ಪ್ರಜಾಪ್ರಭುತ್ವ ಗಳಾದ ರಾಜ್ಯಗಳು ಕಾಲದಲ್ಲಿ ಪ್ರಾಥಮಿಕ ವ್ಯಾಖ್ಯಾನವನ್ನು ಮಾಡುವ ವ್ಯಾಖ್ಯಾನಿಯು ಚಿಕಿತ್ಸೆ ಭೂಮಿಶಾಸ್ತ್ರಗಳ ಹಾಗೆ ಆರೋಗ್ಯ ಸಂರಕ್ಷಣೆಯ ಬಗ್ಗೆ ಪಠ್ಯ ಪುಸ್ತಕಗಳಲ್ಲಿ ಒತ್ತು ಕೊಡಲಾಗುತ್ತಿದೆ. ಆ ಪಠ್ಯ ಪುಸ್ತಕ ಪದ್ಧತಿಯನ್ನು ಪುನಃ ಸ್ಥಾಪನಗೊಳಿಸುವುದು, ಗ್ರಾಮೀಣ ಜನರಲ್ಲಿ ಆರೋಗ್ಯದ ಬಗ್ಗೆ ಅರಿವು ಮೂಡಿಸಲು ಶಿಬಿರಗಳನ್ನು ಸಿನಿಮಾ ಪ್ರದರ್ಶನಗಳನ್ನು ಏರ್ಪಡಿಸುವುದು ಸರಳವು ಸುಂದರವು ಆದ ಭಾಷೆಗಳಲ್ಲಿ ಲಘು ಲೇಖನಗಳನ್ನು ಪ್ರಕಟಿಸುವುದು ಮುಂತಾದವು.

ರೋಗ — ಪ್ರತಿರೋಧ :— ರೋಗ ಬಂದ ಮೇಲೆ ಚಿಕಿತ್ಸೆಯನ್ನು ಪಡೆಯುವುದಕ್ಕಿಂತ ಉತ್ತಮ ರೋಗ ಬರದ ಹಾಗೆ ಚಿಕಿತ್ಸೆಯನ್ನು ಪಡೆಯುವುದು. ಕೆಸರನ್ನು ತುಳಿದು ಕಾಲನ್ನು ತೊಳೆಯುವ ಪ್ರಯತ್ನಕ್ಕಿಂತ, ಕೆಸರನ್ನು ತುಳಿಯದೆ ನಡೆಯುವುದು ಉತ್ತಮ. ಶುದ್ಧವಾದ ಗಾಳಿಯ ಸೇವನೆ ಶುದ್ಧವಾದ ನೀರನ್ನು ಕುಡಿಯುವುದು, ಪೌಷ್ಟಿಕ ಆಹಾರಗಳ ಸೇವನೆ, ವ್ಯಾಯಾಮ ಮಾಡುವುದು ಮೊದಲಾದವು ಆರೋಗ್ಯವನ್ನು ಕಾಪಾಡುವುವು. ಪಂಚ ಭೂತಗಳೆಲ್ಲಾ ವಿಷಲಿಪ್ತವಾಗಿರುವಾಗ ಉಪದೇಶ ಮಾತ್ರ ಸಾಲದು ಅದಕ್ಕಾಗಿ ಕೂಡ ನಮ್ಮ ಸಾಮರ್ಥ್ಯದ ಪರಿಮಿತಿಯನ್ನು ಅರಿತು ಮಾಡಬೇಕಾದುದನ್ನೆಲ್ಲಾ ಮಾಡಬೇಕು.

ಚಿಕಿತ್ಸೆ ಅಂದರೆ ಗುಣ ಪಡಿಸುವುದು :— ಎಷ್ಟೆಲ್ಲಾ ಮುಂಜಾಗ್ರತೆ ಕ್ರಮಗಳು ಇದ್ದರೂ ಪರಿಸರವು ನಮ್ಮನ್ನು ರೋಗಿಗಳನ್ನಾಗಿ ಮಾಡುತ್ತದೆ. ಪ್ರಕೃತಿಯಲ್ಲಿ ಉಂಟಾಗುವ ಬದಲಾವಣೆಗಳು ಪ್ರಕೃತಿಯಲ್ಲಿನ ವ್ಯಾಧಿಗಳು, ಪೌಷ್ಟಿಕ ಆಹಾರದ ಕೊರತೆ ಇವುಗಳೇ ಇದಕ್ಕೆ ಮುಖ್ಯವಾದ ಕಾರಣ. ಆರ್ಥಿಕವಾಗಿ ದುರ್ಬಲ ರಾಗಿರುವ ಎಲ್ಲರೂ ಅವರವರ ಆದಾಯದ ಹೆಚ್ಚಿನ ಅಂಶವನ್ನು ಔಷಧಿಗಳಿಗೋಸ್ಕರ ಇಂದು ಖರ್ಚು ಮಾಡಬೇಕಾಗಿದೆ. ಎಲ್ಲರೂ ಸ್ವಂತ ಚಿಕಿತ್ಸೆಯನ್ನು ಮಾಡಿದರೆ ಈ ಎಲ್ಲಾ ತೊಂದರೆಗಳಿಂದಲೂ ಪಾರಾಗಬಹುದು. ಆದರೆ ಎಲ್ಲಾ ರೋಗಗಳಿಗೂ ಎಲ್ಲರೂ ಸ್ವಂತವಾಗಿ ಚಿಕಿತ್ಸೆಯನ್ನು ಪಡೆಯಬಹುದು ಎಂಬುದು ಇದರ ಅರ್ಥವಲ್ಲ. ಚಿಕಿತ್ಸೆಗೋಸ್ಕರ ಗಿಡ ಮೂಲಿಕೆಯನ್ನು ಆಶ್ರಯಿಸುವುದು ಸುಲಭವಾದ ಮಾರ್ಗ. ಹಾಗೂ ಲಾಭದಾಯಕವಾದ ಮಾರ್ಗ ಎಲ್ಲರೂ ಸ್ವಂತ ಚಿಕಿತ್ಸೆಯನ್ನು ಪಡೆಯಬಹುದು. ಇಂದಿನ ಕಲಿಯುಗವು ಮತ್ತೆ ಶಿಲಾಯುಗಕ್ಕೆ ಮರಳುತ್ತಿದೆಯೆ ಎಂದು ಕೇಳಬಹುದು ಮೊದಲು ಸೂಚಿಸಿದಂತೆ ಜನಸಂಖ್ಯಾ ಸ್ಫೋಟನ ಎಂಬ ಮಹಾ ವಿಪತ್ತನ್ನು ಎದುರಿಸಲು ರಿಯಾಕ್ಷನ್ ಇಲ್ಲದ ಔಷಧಗಳನ್ನು ಕಂಡುಹಿಡಿಯಲು ನಮ್ಮ ಶಾಸ್ತ್ರಜ್ಞರಿಗೆ ಏಕೆ ಸಾಧ್ಯವಾಗುತ್ತಿಲ್ಲ. ಆದರಿಂದ ನಾವು ಪ್ರಕೃತಿಗೆ ಮರಳಬೇಕಿದೆ. ಗಿಡಮೂಲಿಕೆಗಳಿಂದ ಸಾವಿರಾರು ಜನರ ಜೀವವನ್ನು ಉಳಿಸಿದ ಪಾರಂಪರ್ಯ ವಾಪಸ್ಸಾಗುವವರೆಲ್ಲಾ ನಮಗಾಗಿ ಸುಸಜ್ಜಿತವಾಗಿರುವ ಮಹಾ ವೈದ್ಯಶಾಲೆ. ಶತ್ರು — ಅನಶ್ವರನೂ ಆದ ದೇವರು ಒದಗಿಸಿರುವ ಜಾನುವಾರಿಗೂ ಔಷಧಗಳನ್ನು ಗಿಡಮೂಲಿಕೆಗಳ ರೂಪದಲ್ಲಿ ಸಂಗ್ರಹಿಸಿಟ್ಟಿದ್ದಾನೆ. ಇವುಗಳನ್ನು ಬಳಸಿ ಯಾವ ರೋಗಕ್ಕೆ ತಕ್ಕಂತೆ ಉಪಯೋಗಿಸುವ ವಿದ್ಯೆಯನ್ನು ನಾವೆಲ್ಲಾ ಕಲಿಯಬೇಕಾಗಿದೆ. ಈ ವಿದ್ಯೆಯು ಅಪೂರ್ವ. ಕೆಲ ಜನರಿಗೆ ಮಾತ್ರ ತಿಳಿದಿರುತ್ತದೆ. ಈ ವಿದ್ಯೆಗಳನ್ನು ಪ್ರಪಂಚದ ಮಾನವ ಶಾಂತಿಯ ಒಳಿತಿಗಾಗಿ ಈ ವಿದ್ಯೆಗಳನ್ನು ಉಪಯೋಗಿಸುವ ಮಾರ್ಗವನ್ನು ನಾವು ಕಂಡುಹಿಡಿಯಬೇಕಾಗಿದೆ. ಆಗ ಮಾತ್ರ ಲಾಭಕೋರ ಉದ್ದಿಮೆಗಳು ತಮ್ಮದಾಗಿಸಿಕೊಂಡಿರುವ ಸಾವಿರಾರು ಜನರ ಜೀವನವನ್ನು ಉಳಿಸಲು ಸಾಧ್ಯವಾಗುತ್ತದೆ.

ಆದುದರಿಂದ ದೇಶದಲ್ಲಿ ಪ್ರತಿದಿನ ಹೊರಗೆ ಬರುತ್ತಿರುವ ಹೊಸ ಹೊಸ ಮಾರಕವಾದ ಔಷಧಗಳ ದುಷ್ಪರಿಣಾಮಗಳ ಬಗ್ಗೆ ಚಿಂತಿಸಿ ಅವುಗಳ ಗುಲಾಮರಾಗಿರುವ ಇಂದಿನ ಪೀಳಿಗೆಯ ಜೀವ ಉಳಿಸಲು ಸಂಪ್ರದಾಯಗಳನ್ನು ಕೊಡುವುದರಿಂದ ಅವರಿಗೆ ಮನಶ್ಶಾಂತಿಯನ್ನು ಕೊಡಲಿಕ್ಕೆ ಸಾಧ್ಯವಾದಾಗ ಮಾತ್ರ ನಮ್ಮ ಯತ್ನ ಪೂರ್ಣವಾಗುತ್ತದೆ.

ಗಿಡ ಮೂಲಿಕೆಗಳ ಪ್ರಯೋಗಗಳಿಗೆ ಈ ಕೆಳಗೆ ಕೊಟ್ಟಿರುವ ನಿರ್ದೇಶನಗಳನ್ನು ಅನುಸರಿಸತಕ್ಕದ್ದು :—

1. ಒಂದು ಮನೆಯಲ್ಲಿ ಒಬ್ಬರಾದರೂ ಗಿಡ ಮೂಲಿಕೆಗಳ ಎಲ್ಲಾ ಪ್ರಯೋಗಗಳ ಬಗ್ಗೆ ಚೆನ್ನಾಗಿ ತಿಳಿದುಕೊಂಡಿರಬೇಕು. ಅಂದರೆ ರೋಗನಿರ್ಣಯ ಅದಕ್ಕೆ ಬೇಕಾದ ಔಷಧ ಅದನ್ನು ಚೆನ್ನಾಗಿ ಪ್ರಯೋಗಿಸುವ ಕ್ರಮ ಎಲ್ಲವೂ ಸೇರುತ್ತವೆ. ಅದರ ಜೊತೆಗೆ ಆಧುನಿಕ ಚಿಕಿತ್ಸಾ ವಿಧಾನದ ಬಗ್ಗೆ ಸಮಾನವಾದ ಜ್ಞಾನವು ಇರತಕ್ಕದ್ದು.

2. ಪ್ರತಿಯೊಂದು ಮನೆಯಲ್ಲೂ ಕ್ಷೇತ್ರ ತೋಟ ಎಂಬ ಆಧುನಿಕ ಸಂಪ್ರದಾಯದ ಜೊತೆಗೆ ಒಂದು ಚಿಕ್ಕ ಗಿಡ ಮೂಲಿಕೆಗಳ ತೋಟವೂ ಇರಬೇಕು. ಉದಾ :— ತುಳಸಿ, ಶುಂಠಿ, ಅರಿಸಿನ, ಅಮೃತಬಳ್ಳಿ, ಅತ್ತಿ, ಅನಾನಸ್, ಅವರೆ, ಅಂತರಗಂಗೆ, ನಿಂಬೆ, ಕರಿಬೇವು, ಕುರುಕ ರೋಹಿಣಿ, ಕಾಡುಮಲ್ಲಿಗೆ, ಕೊತ್ತಂಬರಿ ಪುದೀನ ಗುಲಾಬಿ, ಶ್ರೀಗಂಧ, ದಾಸವಾಳ, ದ್ರಾಕ್ಷಿ, ನೆಲ್ಲಿ, ಸೀಲಕಿ, ಬಸಳೆ — ಇತ್ಯಾದಿ.

3. ಅಡಿಗೆ ವಿಧಾನಗಳನ್ನು ತಿಳಿಯುವುದರ ಜೊತೆಗೆ ರೋಗ, ರೋಗದ ಲಕ್ಷಣಗಳು ಮತ್ತು ಚಿಕಿತ್ಸೆಯ ಬಗ್ಗೆ ಬರೆದಿರುವ ಗ್ರಂಥಗಳನ್ನು ಓದುವುದು ಮತ್ತು ಕಲಿಯುವುದು ಒಳ್ಳೆಯದು.

4. ಆಧುನಿಕ ಔಷಧ ಕಂಪನಿಗಳ ಪ್ರಚಾರದಿಂದ ಸಾವಿರಾರು ರೂಪಾಯಿಗಳನ್ನು ಸಂಪಾದಿಸುವ ವಾರ್ತಾ ಮಾಧ್ಯಮಗಳಲ್ಲಿ ಸ್ವಲ್ಪ ಭಾಗವನ್ನು ಗಿಡ ಮೂಲಿಕೆಗಳ ಪ್ರಯೋಗಗಳ ಬಗ್ಗೆ ಮೀಸಲಾಗಿ ಇಡತಕ್ಕದ್ದು.

5. ಪ್ರಾಥಮಿಕ ವಿದ್ಯಾಭ್ಯಾಸದ ಜೊತೆಗೆ ರಕ್ಷಣೆಯ ಬಗ್ಗೆ ಮಕ್ಕಳಲ್ಲಿ ಅರಿವನ್ನು ಮೂಡಿಸುವುದು.

6. ಅಮೂಲ್ಯವಾದ ಸಂಜೀವಿನಿ ತೋಟವನ್ನು ಬೆಳೆಸಲು ಅವಶ್ಯವಾದ ಧನಸಹಾಯವನ್ನು ಸರ್ಕಾರವು ಕೊಡುವುದು.

7. ಮೇಲೆ ಹೇಳಿದ ನಿರ್ದೇಶನಗಳನ್ನು ಕಾರ್ಯರೂಪಕ್ಕೆ ತರಲು ಪ್ರತಿಯೊಬ್ಬರೂ ಅವರವರಿಗೆ ತಿಳಿದಿರುವ ಗಿಡ ಮೂಲಿಕೆ ಪ್ರಯೋಗಗಳ ಬಗ್ಗೆ ಪರಸ್ಪರ ತಿಳಿಸುವುದು. ಸಾಯುವ ಕಾಲ ಹತ್ತಿರ ಬಂದಿದ್ದರೂ ತಮಗೆ ಗೊತ್ತಿರುವ ಗಿಡ ಮೂಲಿಕೆ ಪ್ರಯೋಗವನ್ನು ಹಣದ ಪೆಟ್ಟಿಗೆಯ ಬೀಗದ ಕೈಯಂತೆ ತಮ್ಮ ಕೈಯಲ್ಲಿ ಭದ್ರವಾಗಿ ಹಿಡಿದುಕೊಂಡಿರುವ ಅನೇಕರನ್ನು ಕಾಣಬಹುದು. ಹಾಗೆಯೇ ವನವಾಸಿಗಳು ಕೂಡ ತಮ್ಮ ಕೈಯಲ್ಲಿರುವ ಜ್ಞಾನವನ್ನು ಅಮೂಲ್ಯ ನಿಧಿಯ ಹಾಗೆ ಭದ್ರವಾಗಿ ಇಟ್ಟಿದ್ದಾರೆ. ಇದನ್ನೆಲ್ಲಾ ಸಂಗ್ರಹಿಸಿ ಬಹು ಜನರ ಮಧ್ಯದಲ್ಲಿ ಪ್ರಚಾರ ಪಡಿಸಿದಾಗ ಮಾತ್ರ ಉಪಯೋಗವಾಗುತ್ತದೆ.

ಗಿಡ ಮೂಲಿಕೆಗಳನ್ನು ಪ್ರಯೋಗಿಸಲು ಕೆಳಗೆ ಹೇಳಿರುವ ಕ್ರಮಗಳನ್ನು ತಿಳಿದಿರತಕ್ಕದ್ದು.

1. ಎಲ್ಲಾ ಕಾಯಿಲೆಗಳಿಗೂ ಆಗುವ ಗಿಡ ಮೂಲಿಕೆಗಳು ಇಲ್ಲ ಎಂಬುದನ್ನು ಮನದಟ್ಟು ಮಾಡಿ ಇರತಕ್ಕದ್ದು.

2. ರೋಗ ನಿರ್ಣಯವು ಪ್ರಧಾನವಾದ ಅಂಶ. ಅದು ಸರಿಯಾಗಿ ತಿಳಿದುಕೊಂಡಮೇಲೆ ಗಿಡ ಮೂಲಿಕೆಯನ್ನು ಪ್ರಯೋಗಿಸತಕ್ಕದ್ದು. ಆಧುನಿಕ ವೈದ್ಯಶಾಸ್ತ್ರವು ಈ ರೋಗಕ್ಕೆ ನೀಡುವ ಚಿಕಿತ್ಸೆಯ ಬಗ್ಗೆ ತಿಳಿದಿರತಕ್ಕದ್ದು.

3. ಬಳಸುವ ಗಿಡ ಮೂಲಿಕೆಗಳು ಕೈಯಲ್ಲಿ ಇದ್ದರೂ ಸಂದಿಗ್ಧ ಪರಿಸ್ಥಿತಿಯಲ್ಲಿ ವೈದ್ಯರೇ ಪ್ರಯೋಗಿಸತಕ್ಕದ್ದು.

4. ಯಾವುದೇ ಕಾರಣಕ್ಕೂ ರೋಗಿಗಳನ್ನು ಪ್ರಯೋಗಗಳಿಗೆ ಗುರಿಪಡಿಸಕೂಡದು. ಇತರರಿಂದ ಅರಿವನ್ನು ಗಳಿಸಲು ಪ್ರಯತ್ನಪಡುವವನೇ ಸರಿಯಾದ ವೈದ್ಯ ಅಥವ ಡಾಕ್ಟರ್ ಎಂಬ ತತ್ವವನ್ನು ಮರೆಯಬಾರದು. ತನ್ನ ಮಾತಿಗೆ ಮೀರಿ ಪ್ರಯೋಗವಲ್ಲವೆಂದು ತಿಳಿದುಕೊಳ್ಳಬಾರದು.

<u>ಹರ್ಬಲ್ ಗಾರ್ಡನ್</u> :— ಆಧುನಿಕ ಲೋಕದ ಪ್ರತಿಯೊಂದು ಮನೆಯಲ್ಲೂ ಅಲ್ಪ ಸ್ವಲ್ಪ ಔಷಧಗಳನ್ನು ಸಂಗ್ರಹಿಸಿ ಇಟ್ಟಿರುವುದು ಸರ್ವ ಸಾಮಾನ್ಯ. ಕೆಮ್ಮು, ತಲೆನೋವು, ಜ್ವರ, ಬೇಧಿ, ಇವುಗಳಿಗಾಗಿ ನಾವು ಸಂಗ್ರಹಿಸಿ ಇಟ್ಟಿರುವ ಔಷಧಿಗಳು ದೀರ್ಘಾಯು ದಿನಗಳಲ್ಲಿ ಅಥವ ತಿಂಗಳುಗಳಲ್ಲಿ ಉಪಯೋಗಕ್ಕೆ ಬಾರದೆ ಇದ್ದಲ್ಲಿ ಅವುಗಳು ಉಪಯೋಗ ಶೂನ್ಯ ವಾಗುತ್ತವೆ. ಸಾಧಾರಣವಾಗಿ ನಮ್ಮ ಮನೆಯಲ್ಲಿ ಇರುವವರಿಗೆ ಉಂಟಾಗುವ ರೋಗಗಳನ್ನು ಗುಣಪಡಿಸಲು ಅವಶ್ಯವಾಗಿ ಬೇಕಾದ ಔಷಧಿ ಗಿಡಗಳನ್ನು ಬೆಳೆಸುವುದರೊಂದಿಗೆ ಅವಶ್ಯಕತೆಗೆ ಅನುಸಾರವಾಗಿ ಅದನ್ನು ಉಪಯೋಗಿಸಬಹುದು ? ಒಂದು ಮನೆಗೆ ಅವಶ್ಯವಾಗಿ ಬೇಕಾಗುವ ಗಿಡಮೂಲಿಕೆಗಳನ್ನು ಮನೆಯ ಹತ್ತಿರದಲ್ಲಿ ಬೆಳೆಸತಕ್ಕದ್ದು.

<u>ತುಳಸಿ</u> :— ಭಾರತದ ಎಲ್ಲಾ ಪ್ರದೇಶಗಳಲ್ಲಿ ಸುಲಭವಾಗಿಬೆಳೆಯುವ ದಿವ್ಯ ಔಷಧ ತುಳಸಿ. ತುಳಸಿಯಲ್ಲಿ ಸುಮಾರು 12 ತರಹಗಳಿವೆ. ಇದರಲ್ಲಿ ಕೃಷ್ಣ ತುಳಸಿಯನ್ನು ಚಿಕಿತ್ಸೆಗೆ ಉಪಯೋಗಿಸತಕ್ಕದ್ದು. ಅಲೋಪತಿ ಚಿಕಿತ್ಸೆಯಲ್ಲಿ ಹೇಳುವ ಪ್ರಕಾರ ಇದರಲ್ಲಿ ತೈಲ ವೋಲೇಟೈಲ್ ಎಂಬ ಔಷಧ ಇರುತ್ತದೆ. ಇದರ ಎಲೆ, ಬೀಜ ಹೂವು ಬೇರು ಎಲ್ಲಾ ಔಷಧವಾಗುತ್ತದೆ. ಇದರ ಹೂವನ್ನು ಒಣಗಿಸಿ ಹುಡಿ ಮಾಡಿ ಟೀ ಮಾಡಿ ಕುಡಿದರೆ ರಕ್ತ ಶುದ್ಧಿಯಾಗಿ ರೋಗಾಣು ಬಾಧಿಸದ ಶರೀರವನ್ನು ರಕ್ಷಿಸುವುದು. ಅಲರ್ಜಿ ಮುಂತಾದ ಚರ್ಮ ರೋಗಗಳನ್ನು ತಡೆಯುತ್ತದೆ. ಕೆಮ್ಮು, ಜ್ವರ, ಮುಂತಾದವು ಕಡಿಮೆಯಾಗುತ್ತವೆ. ತುಳಸಿ ಮನೆಯ ಸುತ್ತ ನೆಟ್ಟು ಬೆಳೆಸಿದರೆ ಸೊಳ್ಳೆಗಳ ಕಾಟದಿಂದ ರಕ್ಷಣೆ ಪಡೆಯಬಹುದು. ಅದರ ಜೊತೆಗೆ ಅಂಟುರೋಗಗಳನ್ನು ನಾಶ ಮಾಡುವುದರೊಂದಿಗೆ ವಾಯುವನ್ನು ಶುದ್ಧ ಮಾಡುವುದಕ್ಕೂ ಉಪಯುಕ್ತ ವಾಗುತ್ತದೆ.
ಇದರ ನೀರನ್ನು ಹಿಂಡಿ ಕುಡಿದರೆ ಕಫ ಸಂಬಂಧವಾದ ಎಲ್ಲಾ ರೋಗ ತೊಂದರೆಗಳು ನಿವಾರಣೆಯಾಗುತ್ತವೆ ಗಾಯಗಳಿಗೆ ಇದರ ನೀರನ್ನು ಹಿಂಡಿದರೆ ಒಣಗುತ್ತದೆ. ಇದು ಒಂದು ರೋಗ ಪ್ರತಿರೋಧಕ.
ಮಲೇರಿಯದ ಕಾಲದಲ್ಲಿ ಬೆಳಗಿನ ಜಾವ ಪ್ರತಿದಿನ 7 ಎಲೆಗಳನ್ನು ತಿಂದರೆ ಗರ್ಭಕಾಲವು ದೂರವಾಗುತ್ತಿತ್ತು ಇದರ ಎಲೆಯನ್ನು ತಿನ್ನುವಷ್ಟು ಕಾಲ ಗರ್ಭಧಾರಣೆ ಆಗಲಿಲ್ಲ. ಎಂಬ ಪ್ರಚಾರವು ಬ್ರಾಹ್ಮಣರಲ್ಲಿದೆ.
ಇಲಿಗಳಲ್ಲಿ ನಡೆಸಿದ ಇದು ಸರಿ ಎಂದು ದೃಢಪಡಿಸಿದೆ. ನವರ್ ಇನ್ಸ್‌ಪೆಕ್ಷನ್ ಇದು ಉತ್ತಮ. ಇದರಲ್ಲಿ ಟ್ರಿಪ್ಟೋನ್ ಅಂಶ ಅಡಗಿದೆ.

A Latin American Case Study

THE VILLAGE

Miguel was worried this time. His two year old son, Juanito, had never been this sick before: he had a cough that would not quit, he felt hot and had a dull, faraway look so different from his usual happy laugh. For a week, his wife, Maria, had tried everything in the house she could think of, yet nothing worked. Her neighbors cautioned against "hot" foods, but Juanito was not hungry anyway and hardly ate or drank.

A serious problem, not responding to home remedies

THE VILLAGE HEALTH WORKER

Maria took the boy across the valley to see Ramon who kep a small shop in his farmhouse. Ramon had been selected the year before by the village for training at the health center. From his training, he know that prolonged fever and cough could be pneumonia. His stock of medicines no longer included packets of penicillin tablets: there had been a lot of chest colds around and now only one packet was left. He broke it open and took out three tablets, embarrassed that he could not give the packet and explaining that at last month's resupply meeting no stock was available. Ramon was angry too, behind his words of instruction, thinking of what he'd say to the Health Center Supervisor the next time. Why bother to go to the meetings at all if there were no drugs? He was ashamed to be trying to satisfy the village's needs with advice alone - it wouldnot do, that's all.

A good diagnosis, but inadequate treatment due to drug supply shortage

Disappointment and skepticism from the patient

A loss of credibility for the health worker

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IN THE TOWN

Miguel had walked the burro half the night to get to the market early. He sold his load of carrots quickly and took the money to the pharmacy, where he described Juanito's fever and cough. A young boy was tending the shop for his uncle, who was away buying drugs in the city. He remembered people coming in for fever and his uncle giving them pills from a bottle lebeled chloroquine: he could easily reach it. Miguel was glad to buy the pills and burried off.

Untrained dispenser, inaccurate prescribing

At home Miguel found Juanito no better. Maria had given him the three penicillin tablets at noon yesterday when she got home, which he had swallowed with difficulty. He smiled weakly as his father attempted to give him a chloroquine tablet, but screamed and spit it out with its bitter taste, his cough and tearless cry sending Miguel and Maria into deeper despair.

Inappropriate dosage schedule

THE HEALTH CENTER

At the Health Center, one and a half day's walk from the village, Peter, the Supervisor, was not eager to face the Village Health Workers again without enough supplies. It was even worse knowing that the next region had surplus stocks accumulating from two years of deliveries, though village workers had only recently

Maldistribution of limited supplies

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begun work. His own credibility was at stake; their enthusiasm for continuing education was dissolving into discontent and declining attendance, fragmenting the program which had been so enthusiastically received by the villages the year before. He knew he would have to get the Regional Health Office to respond soon, or all momentum would be lost in yet another example of government failure.

Declining participation in village health program

THE REGIONAL OFFICE

Jose was perplexed. As Regional Health Officer, the hospital was his constant concern (as the central health facility on which two million people depended), yet he had the rural health centers, too. Now both were complaining about drugs. He knew, as did everyone else, that drugs, theoretically free, were sold by some staff members to supplement salaries and income from unofficial private practice. There was never enough to go around, and he could no longer reallocate health center supplies to the hospital - too much demand in the rural areas now. On top of that he was beginning to wonder about his administrator, whose latest story of shipments lost or arriving undercounted only complicated the problem. If he only knew what was used last year in each center, he'd be able to juggle demands a bit better, at least until the decision on his own transfer was made, and he was out of the mess.

Inadequate salaries contributing to illegal activities

Competing demands for inadequate supplies

Incomplete record keeping hinders planning

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At the hospital, the pharmacist reached high on the shelf for the last tin of penicillin tablets that was left. The top clattered to the floor as she looked first at the label, not quite outdated, and breathed a sigh of relief - until she looked inside at the crystallized mass of tablets, decomposed after the top had been loosened in transit. She had nothing to give the man with the prescription and the woman with the swaddled child gasping in her arms. They turned away, wondering what to do next.

Poor packing

Carlos, the hospital administrator, took pride in his efforts to juggle the region's inadequate health resources. His years of service balanced a lack of training and made him a respected official. He could not, however, figure out how to handle the drug mess, which got worse every year as demand outstripped supply and more health facilities were opened. A few facilities had overstocks while others were always out. It all seemed so unpredictable Rumors of corruption bothered him most of all, a man whose pride in his work at a difficult job had always been so important. Now, with health workers beginning to provide some simple health services in almost every village, the resupply and financial problems were overwhelming. Carlos understood how tempting valuable drugs were to many staff trying to get by on the small government salary - but for people to insinuate that he was involved was the most unpleasant thing he had to live with. Now if only he could

Untrained administrative staff

Supply of new health workers rapidly outgrowing the supply of drugs

get the requisitions and the records together, he could be able to justify his position to Central Medical Stores and get them to release the emergency request he had placed two weeks earlier.

Inadequate management information for stock control and financial planning

CENTRAL MEDICAL STORES

As Juanito's parents managed to get the seemingly lifeless child admitted to the paediatric ward of the hospital, Enrique, the Chief of Central Medical Stores, searched into the evening to find the intravenous penicillin required. His anger at the disorganization of the warehouse exhausted him more than the search.

Warehouse disorganized

Enrique was responsible, he knew, but how could he do it all? The stock reports were disorganized and he never had found time to train the clerks. The late arrival of shipments cleared from customs after sitting on the wharf in the rain had compounded the mess, with crates and cardboard a soggy stew all over the floor. And the stock count suggested more losses on the docks or in transit than just to rats and rain.

Untrained staff

Mis-estimated lead times, pilferage, spoilage, port clearing problems

At last he found the penicillin and sent it off with the pharmacy aide and frightened farmer. He was too tired to think about the endless emergency requests from the regions which always seemed to pile in, especially when vehicles were down, awaiting parts. Even worse,

Transportation confusion and vehicle breakdown

tomorrow the would have to try to get approval for an air freight purchase of penicillin tablets since the lowest bidder had defaulted on the shipment. It would cost a fortune on such short notice....

Expensive emergency purchase; supplier default

On a truck heading back towards the village, Miguel was a mixture of emotions. He was relieved that the doctors had taken Juanito into the big hospital and that Maria could stay at his side. But he was frightened by the plastic tubes he had had to buy at the pharmacy, which were now connected to Juanito's arm. And he was fearful for the future. Life would be very hard again, now that he would have to sell some of his animals to pay for medicines. But he thanked God that Juanito still had a chance.

Continuing hardship and uncertainty

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CONSUMER ALERT--CONSUMER ACTION*

ravi narayan

The problem

The Indian Council of Medical Research (ICMR) and the Indian Council of Social Science Research (ICSSR) have, in a joint study group report entitled 'Health for All - An alternative Strategy' warned that 'eternal vigilance is required to ensure that the health care system does not get medicalised, that the doctor-drug producer axis does not exploit the people and that the abundance of drug does not become a vested interest in ill-health'. This warning is a serious indictment of the drug industry and the medical profession in the country. It confirms the growing evidence that drugs are being pushed on an unsuspecting public by devious methods which masquerade as 'sales promotion' of drug companies and 'professional prescribing practice' by doctors.

A spate of reports have been appearing in our newspapers and periodicals of late, on drug-related issues and a review of these highlight that many of the following practices are not at all uncommon in India:

i) Sale of drugs banned in other countries eg: Lomotil and Clioquinol preparations.

ii) Sale of irrational combinations and formulations eg., Hathi Committee has suggested weeding out of atleast 23 such preparations.

iii) Sale of drugs without adequate precautionary product information

iv) Sale of drugs at highly inflated costs eg: it is reported that Analgin is being sold at 20 to 30 **times the cost of production.**

v) Promotion of drugs for **indications** that are not clinically proved and are often potentially dangerous eg: Promotion of EP forte combinations for pregnancy testing and induction of abortion. There is well documented scientific evidence that the risk of foetal deformity is increased by the use of these hormonal preparations.

vi) Sale of spurious, adulterated or poor quality drugs eg: Turmeric powder in tetracycline capsules and poor quality and reaction producing intravenous fluid preparations have been reported.

vii) Sale of old, expired and unused drugs. There is the double danger of effects of denatured drugs as also of inadequate dosage.

viii) Over-prescription and misuse of tonics, high-protein foods, hormonal preparations and baby foods that are both superfluous and a drain on the family economy.

ix) Sale of drugs over the counter without doctor's prescriptions or the necessary statutory checks.

x) Production of drugs for profits rather than health needs of people - eg: The ICMR/ICSSR report highlights that drugs for diseases like leprosy and tuberculosis which affect millions are produced at one-third

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and one-fourth of the actual requirements while tonics, vitamins and high protein substitutes are being produced in wasteful abundance.

It is evident then, that what is needed in the country today is a consumer awakening and awareness building process that will sensitise people to the realities of the drug industry, mobilise public opinion, sensitise policy makers, confront the medical establishment and challenge the drug industry. This process will have to lead to the initiation, promotion and sustenance of consumer action to ensure that the drug policy in India is more 'people' and 'health' oriented. Is there any evidence of such an awareness?

Consumer alert and action

Beginning in the late seventies, there is an increasing number of organisations, associations, projects and action groups who have begun to create an awareness of drug-related policy issues. These groups are predominantly if not exclusively urban-based, consisting of young professionals and intellectuals from different ideological backgrounds.

Since the Medical Profession is the 'instrumental consumer' ie., they prescribe the drugs, many of these groups have directed their efforts particularly towards them. Many others are health or development associations, science popularising movements and consumer associations who are increasingly taking up drug-issues as one of their many activities. The list of groups which makes interesting reading are -

- Voluntary Health Association of India (VHAI), New Delhi
- medico friend circle (mfc) Pune
- Arogya Dakshata Mandal (AIM), Pune
- Delhi Science Forum (DSF), New Delhi
- Society of Young Scientists (SYS), New Delhi
- Lok Vignyan Sangathana (PSM), Maharashtra
- Kerala Sastra Sahitya Parishad (KSSP)
- Concern for Correct Medicine (CCM), New Delhi
- Consumer Action Front (CAF), New Delhi
- Consumer Education and Research Centro (CERC), Ahmedabad
- Centre for Education Development (CED), Bombay
- Federation of Medical Representatives Association of India (FMRA), Patna.

All India Women's Conference (AIWC) and so on. It is impossible to document all the efforts of these groups but the main types of action they have been involved in are:-

1. Publications

mfc published two anthologies of their bulletin articles 'In Search of Diagnosis' (1977) and 'Health Care Which Way to go' (1982) which included many articles on drug policy

related issues. VHAI's special issue of the bi-monthly 'Health for the Millions' was entitled 'Medicines, as if people mattered' (1981). It covered many aspects of drug use and abuse and tried to stimulate voluntary initiatives from the public and the medical profession. CED published an exhaustive, well-researched report on "Aspects of Drug Industry in India" (1982) to stimulate further interest.

2. Meetings

These were organised by many of the groups to bring together people interested in the problem to share views and discuss action plans. The Drug Industry and the Indian People (DSF, SYS, FMRA and others, November 1981), Drug Issues and Feasible Alternatives (VHAI, Pune, Jan '82), Drug use and Abuse (mfc, Tara, Jan '82) were three such meetings. The Seminar on National Health Policy (New Delhi, VHAI, AIWC, CCM, April 1983) also discussed drug issues and stressed the need for information dissemination and consumer action.

3. Educational Campaign through letters and media

AIM launched a movement called 'Operation Medicine' in July 1977 with letters to medical practitioners and articles in the press requesting for a stop in prescription of forte vitamin preparations, irrational B-complex formulations, tonics and tinned foods and boycotting of certain drugs being sold at inflated costs.

VHAI launched a campaign in March 1982 (International Women's Day) against the misuse of hormonal preparations for pregnancy testing. Letters were sent to doctors and chemists informing them about the dangers and requesting them not to misuse these products. Articles were published in leading newspapers and periodicals. The movement snowballed and the government decided to ban EP forte combinations. The movement continues to challenge government action which has given a lag period of six months to drug companies to move stock before ban becomes effective.

mfc launched a campaign early this year about the rational management of diarrhoeas in children with a hope to prevent misuse of various available preparations that do not have much therapeutic value. Press releases, informative articles and letters to drug controllers have been major constituents of this campaign.

4. Newsletters/Bulletins

One of the best examples of continuing education of doctors on drug issues is the Pune Journal of Continuing Health Education published by AIM. This bulletin sensitises its subscribers to the half-truths of medical advertising apart from providing reliable information on latest drugs. The Drugs Bulletin of Pharmacology Department of Post-Graduate Institute, Chandigarh, is another example. mfc bulletins have also regularly featured articles on drug issues.

5. Information net-work among voluntary action groups

To maintain this growing interest, VHAI has set up a special cell on 'Low Cost Drugs and rational Therapeutics'. This Cell, has been keeping groups all over India informed about new problems and follow up action of campaigns. Other groups have also initiated informal network exchanges.

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6. Low Cost Drug Ventures

The Bangarapet Medical Mission Tablet Industry has been a very successful small scale venture in providing low cost, good quality formulations to a limited group of mission hospitals in the country. Recently in Gujarat a new project called LOCOST has been initiated. This is a collective voluntary endeavour for rational therapeutics through promotion of low cost, quality, generic named medicines. An important dimension of the project will be an educational effort addressed to the voluntary sector for minimum use of drugs and the socio-economic implications of irrational therapeutics.

7. Drug Issues in Science Movements

With the growing interest on drug related issues well-known science movements in the country like KSSP and PSM have also decided to coordinate with other agencies in joint campaigns. At the All India convention of the People's Science Movement at Trivandrum convened by KSSP in February 1983, a health group was formed which drew up a joint action programme having the following four components.

a. Ban on EP Forte combinations
To oppose the wrong arguments of drug companies being used to pressurise government to lift ban order on these combinations.

b. Campaign about Anemia in Women and Irrational anti-anaemic drug preparations in the market. PSM Maharashtra included it as a topic for their yatra in May 1983.

c. Campaign against irrational Diarrhoea Management in Children. mfc would initiate campaigning from June 1983.

d. Campaign against multinational in Indian Drug Industry. A campaign by FMRA would be organised in October 1983, to coincide with the annual Jatha of KSSP and to make people aware of the role of multinational corporations in India.

Towards a people's movement

All the above efforts are small steps towards a much more wide based consumer movement against drug use and abuse and profit oriented drug policies. However, it must be remembered that in a country like ours when a very large percentage of people are below the poverty line and when more than 75 percent of the people have little access to basic health science a consumer action programmeonly on drug matters will continue to be cut off from the needs and aspirations of the majority.

Dr Norman Bethune, favour for his work in China wrote, "The best form of providing health care and health protection would be to change the economic system which produces ill health to liquidate ignorance, poverty and unemployment".

One hopes that eventually drug-related issues will become part of a much wider people's campaign for health development and socio-political change because at the root of the entire problem of drug production and availability lies what Ivan Illich has aptly described as "Socialiatrogenesis - ie., health policies reinforcing an industrial organisation which generates ill-health'.

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DRUG PUSHERS OR HEALERS?

"The greatest danger to health in India is the over medicalising of our health care system. Eternal vigilance is required that the doctor-drug producer axis does not exploit the people and that the 'abundance' of drugs does not become a vested interest in health".

- ICMR/ICSSR study on 'Health for All' --An alternative Strategy.

The problem of Drug policy and low cost drugs encompasses a very wide spectrum of issues--multinationalism, industrial policy, medical advertising, research, drug production, medical education, price control and so on. The recent upsurge in interest in this important area of health policy has led to the publication of numerous reports, books and papers and many seminars and workshops have and are being organised. In the final analysis any collective action in the form of policy, analysis, research or education can only result from an individual understanding of the related issues translated into a prescribing policy to be accepted volunarily by doctors, nurses, para-professionals and others in their attempt to contribute to a solution of the problem.

Readers of this note are requested to think over the following facts, observations, conclusions taken from WHO, ICMR, ICSSR, Earthscan, VHAI, Govt. of India and other source of information. Can we collectively accept as many of these 9 points as possible?

(1) 15000 branded drugs are on sale in India but a Government Committee believes that health needs would be met by only 116 drugs.[2,3]

There is now an overproduction of drugs (often very costly) meant for the rich and well to do, while the drugs needed by the poor people (and these must be cheap) are not adequately available!

WHO in its report on selection of essential drugs[5] has prepared a list of 200 drugs needed for health care.

The real purpose of an essential drug list must be seen as taking drugs to those[2] who need them most, not as reducing the drugs bill.

Could we accept an eseential drug list for our practice in which cost would be an important criteria in selection in addition to efficacy, safety and quality?

(2) All UN agencies and governments involved in preparing a list of essential drugs are convinced that prescriptions should be through the generic names of drugs only.[6]

Generic name is not chemical name but official, international, non-proprietary name eg., not Acetylsalicylic acid but Aspirin.[2]

Branded named products cost higher because they include promotional costs and cost of claims of additional ingredients in formulation eg., Librium by Roche is available for Rs.16/- per 100 tablets but generic equivalents are available for Rs.1.50.[6]

A study of UNCTAD has shown that bio-availability argument for branded drugs ie., therapeutic difference[6] based on formulation is not very valid for most drugs.

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<u>Could we accept generic prescribing?</u> ie., Ry Aspirin not Plusprin, Disprin etc.

(3) In India 60 firms with foreign shares accounted for 70% of the country's total drug sales in 1973-74. The remaining 30% was shared by 116 large and 2,500 small manufacturing companies.[2]

Drug industry in India is an offshoot of development of the industry in the Western World and is in private hands which produces mainly for profit.

ICMR/ICSSR and the Hathi Commission have recommended that the small scale sector, cooperative sector should be encouraged. Hospital and dispensary based formulations should be promoted.

<u>Can we prescribe drugs which are Indian rather than foreign, Government rather than private industry, small scale and cooperative sector rather than large lsector?</u>

(4) "One of the most distressing aspects of the present health situation in India is the habit of doctors to prescribe glamorous and costly drugs with limited medical potential." 1

"The drugs required by the poor are not produced on the main grounds that there is no profitable market and adequate demand for them, while the country continues to be flooded by plethora of costly and wasteful drugs meant for the minor illnesses of the rich and well to do." 1

"Multiple drug combinations often containing drugs in amounts far in excess of what is required are presently marketed in India. There is a collosal national wastage of drugs because of such combinations.[3]

Packaging increases the cost of drugs very greatly because the trend is to make it attractive and highly elegant and to add cosmetic embellishments to promote sales!.[1]

The drugs Consultative Committee examined 34 categories of fixed dose combinations and concluded that in the case of 23 categories of these formulations, there was no therapeutic rationale for their marketing.[6] The Government of India issued a notification in July 1983, banning 22 fixed drug combinations.

<u>Could we stop prescribing drugs whose only additional advertised values are</u> -

a. cosmetic embellishment; b. elegant packing;
c. irrational combination; d. imitative drugs;
e. inadequate evidence of greater value?

Do we know which are these banned drugs? Why were they banned? Can we stop prescribing them?

(5) 25% of a total production of Rs.700 crores in 1976 as analysed by a Task force of the Planning Commission was on vitamins, tonics, health restoratives and digestive enzymes!

An ICMR/ICSSR study observed that production of INH and Dapsone are a third and a quarter respectively, of the minimal requirements of the country. On the other hand, tonics and vitamins which are mostly alcoholic preparation and spin money are produced in wasteful abundance![1]

........3

A NIN study on tonics has shown that most of the high potency or 'Forte' preparations of multi-vitamins are a sheer economic waste.[4] These are not only a drain on the patients' purse but also help only to vitaminise our sewage systems.

Can we stop this 'tonic' and 'vitamin' practice?

(6) A WHO report notes that drug advertising and contacts with representatives of pharmaceutical firms are often the main source of information for a physician on drugs and sometimes theonly one. Such information is largely influenced by commercial interest.[6]

Drugs are often being prescribed by doctors not because they think a particular one is best suited for the situation but because the company which produced it gives the maximum monetary and material advantages and inducements to them. These range from free samples (often sold in practice), pens, calendars, diaries, teas, lunches, travel and conference attendance costs.[1,6]

Medical training in colleges does not train future physicians to judge a preparation critically........nor does it include conscious immunization against the half truths of persuasive industrial advertising.[6] CAN WE STOP ACCEPTING PHYSICIANS SAMPLES AND OTHER FORMS OF INDUCEMENT FROM MEDICAL COMPANIES?

(7) Many medicinal herbs and roots that are used by grandmothers, local dais and village medicine men have been scientifically tested and researched and known to have therapeutic value. Their descriptions in journals collect dust in reference libraries.[2,6]

Herbal medicines and home remedies are not only low cost and easily available but their popularisation will help in breaking the doctor-drug producer axis for over 80% of the common minor ailments which are now being overtreated.

China has integrated over 50 herbal medicine and home remedies in their armamentariums not only as a drug policy but as an expression of local participation in health care.[2,6]

Can we propagate simple home remedies and locally available herbal medicine after studying their efficacy?

(8) A very large number of techniques of healing are being researched today in which diseases are tackled and cured without drugs. Non-drug therapies include Yoga, Pranayama, Meditation, Accupuncture, Acupressure and Chiropractice among others. Traditional systems of Medicine such as Ayurveda, Unani, Homeopathy which use drugs but of a different sort are being researched in various places and the therapeutic effectiveness of many of their products are being discovered and documented.

Can we adopt a more open policy of enquiry and introduce use of traditional medicine and non-drug therapies in our practice after scientific enquiry?

(9) Health Care is becoming increasingly a quest for priorities. "Clean water before anti-biotics, food before vitamin pills, vaccination before kidney machines, mothers milk before powdered baby foods mixed with dirty water, health for villagers and slums before more hospitals for the affluent suburbs of capital cities.[2]

In spite of our preoccupation with Drug Prescribing policy, could we commit ourselves to other more important Health Care Priorities?

– ravi narayan
background paper, mfc Annual Meet 1982

References

1. Health for all - an alternative strategy - ICMR/ICSSR Report (1980) Chapter on Drugs and Pharmaceuticals

2. Drugs and the Third World, Anil Aggarwal, Earthscan publication, 10 Percy Street, London WIPODR (1978)

3. Hathi Committee: Report of the Committee on Drugs and Pharmaceutical Industry, Ministry of Petroleum and Chemicals, Govt. of India (1975)

4. In Search of aDiagnosis, an mfc book containing reprints from its bulletin

5. The Selection of Essential Drugs, WHO Expert Committee, WHO TRS No.615 (1977) and 641 (1979).

6. Medicines as if people mattered - Health for the Millions (VHAI Bimonthly) Vol.VII No.283, April-June 1981.

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To PUNE MEDCO Fwd / circul.

90-16

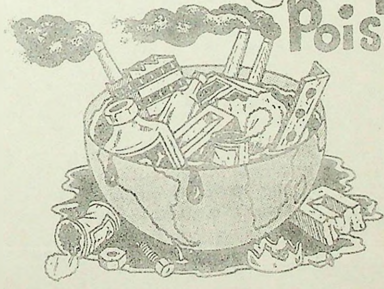
IOCU

CONSUMER INTERPOL

now you do not have to take all these hands down

Corporate Crime of the Century

Circle of Poison



Pesticides & Pills

FOR EXPORT ONLY

COMMUNITY HEALTH CELL
47/1, (First Floor) St. Marks Road
BANGALORE - 560 001

WHAT IS CONSUMER INTERPOL?

Consumer Interpol - If you think the name refers to a force assembled by consumers to fight international corporate crime, you are right. Rampant dumping of hazardous products, dangerous technologies and toxic wastes; countless victims (many of them disabled, dying or dead); the absence of any comprehensive effort to bring about a solution.... These have given rise to an acute sense of impatience among consumer groups and prompted action against the unconscionable deeds of some transnational corporations and 'aid' agencies. *Consumer Interpol*, set up by the International Organization of Consumers Unions (IOCU), is a dynamic entity incorporating an alert system, safety campaigns, advocacy for regulations, research and training. It aims to organize citizen action against an intolerable problem.

HOW DOES IT WORK?

IT'S GLOBAL. *Consumer Interpol*, as the name suggests, is global. At the core of the network are members of the IOCU group numbering more than 120 organizations located in some 50 countries and representing every continent. The *Consumer Interpol* is developing regional centres to support activities in every part of the world. Each of these centres will have a wide network of correspondents; the aim is to have at least one in every country. Correspondents are drawn from consumer, health and environmental groups and a wide range of knowledgeable people including journalists and scholars.

IT'S PARTICIPATORY. This information-and-action network encourages participation; it calls for a cooperative response to a shared problem. All components of the *Consumer Interpol* are two-way systems - they GIVE help and they TAKE help. The 'alert' system, for example, welcomes information on hazards from all quarters. Whatever vital information it receives will be channelled out as warnings to those who need it. Regional centres, the collection and dissemination points, will assess information received with the help of some experts.

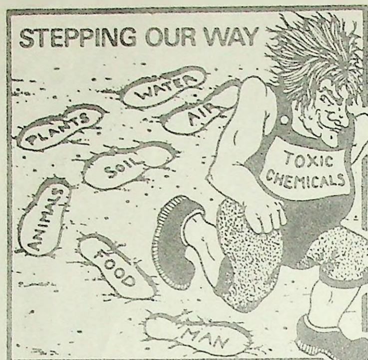
IT'S AN ADVOCACY NETWORK. The *Consumer Interpol* does not stop at issuing 'alerts.' It also takes action from time to time to ensure that the hazards are removed through legislation and other means. What the network will do is flexible and it depends on the issue at hand. A localised problem may only need a localised response with help from a few other organizations. For a global problem, *Consumer Interpol* may mount a campaign involving every concerned group that wishes to combat the problem. IOCU is not new to such international campaigns. It is playing a key part in those involving infant formula and pharmaceuticals through the International Baby Food Action Network (IBFAN) and Health Action International (HAI).

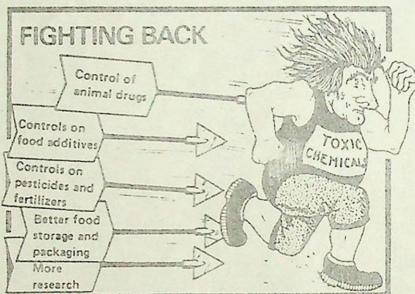
IT'S SUPPORTIVE. The supportive arm of *Consumer Interpol* is aimed at making sure the action-information balance, vital to any international campaign, is well-maintained. Research will feed the system with detailed information while training ensures that gathered information is well stored and efficiently used. A data bank with links to other documentation centres will be maintained. There will also be active links with programmes like: • the International Register of Potentially Toxic Chemicals (IRPTC) of UNEP; • the International Programme on Chemical Safety of ILO, UNEP and WHO; • the ILO International Occupational Safety and Health Hazard Alert System and • UNEP's Global Environmental Monitoring System (GEMS).

THE THIRD FORCE

"The lack of controls on the exports of toxic substances that are banned or restricted poses an undue burden on the 'inner limits' of man; it poses an undue burden on the 'outer limits' of our environment; it poses an undue burden on developing countries that have not yet the skills and resources to deal with the problem adequately. The '3rd system,' the citizens' groups in developing and developed countries, must act together because we cannot rely on the '1st system,' the governmental system or the '2nd system,' the commercial network, to deal adequately with this problem. We are concerned here with a major health issue, we are concerned with a human rights issue, and we are concerned with the protection of the environment."

— Anwar Fazal, President of IOCU, Keynote address to an NGO Seminar on the Export of Toxic Substances, New York, November 20, 1981.





Graphics : David Eaton

ACTION CHECKLIST

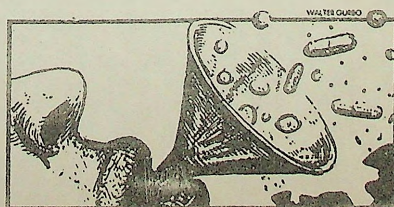
Should you receive information on any of the following...

- marketing of dangerous consumer goods like toxic foods and dangerous toys
- export of hazardous wastes
- plants that expose workers to serious health hazards
- adoption in exporting countries of new bans or strict controls over hazardous consumer goods, drugs, pesticides or industrial chemicals (this is to alert the network to the possibility of dumping)
- newly reported outbreaks of illness or death due to previously known hazardous agents

...inform the International Organization of Consumers Unions (IOCU) and we will take the appropriate action. (Our addresses are on the back page.)

DID YOU KNOW?

- At least 25% of US pesticide exports in 1980 were products that were banned, heavily restricted, or have never been registered for use in the United States.
- About 1.5 million people are being poisoned by pesticides every year, with half of the cases in poor countries. Some 30,000 deaths a year - three quarters of them in the Third World - are believed to be due to pesticide poisoning.
- Several million children's garments treated with a cancer-causing fire retardant called Tris were shipped overseas after being forced off the US market by the Consumer Product Safety Commission.
- Many pharmaceutical companies fail to label their products adequately regarding proper use and dosage. Often even doctors are deprived of crucial information like potential side effects.
- In India, the subsidiaries of major British and American asbestos companies operate facilities that are 50 years behind the standard of practice the firms observe in their home countries.
- The US Environmental Protection Agency estimated that in 1980 at least 57 million tons of hazardous waste was produced in the United States. There are not enough safe, secure disposal sites to handle a fraction of it.



Source: The Corporate Crime of the Century

90-11

Catholic Hospital Association of India

CBCI Centre, Goldakkhana

New Delhi 110001

Date : 20.6.1984

Dear Friends,

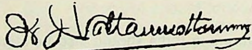
One of the problems our health services face is that of ever increasing price of drugs. Our poor people cannot afford to buy drugs for them. The situation will go on getting worse unless corrective measures are taken in time. Drugs that are banned by our government are still manufactured and sold in our country. The following is an attempt to work towards a more permanent solution. It is necessary that we all join hands to fight against this evil in the health care field. If you are convinced of it, all what you have to do is to take a sheet of paper give some particulars of the health care personnel in your institution (doctors, nurses etc) together with their signature and send it

Dr. Mira Shiva
Co-ordinator
Law cost drugs & rational therapeutic
Voluntary Health Association of India
C-14 Community Centre
SDA, New Delhi 110016

at your earliest convenience. She will collect all the signatures and send them to the concerned authorities. Please put the seal of your institution also on the paper.

Requesting your cooperation in this great task and with personal regards,

Yours in the Divine Word,



(FR. JOHN VATTAMATTOM SVD)
Executive Director

MEMORANDUM

We, the health personnel and citizens of India recognize health as a fundamental right of the people in this, our welfare state. We recognize and strongly believe that the health status of our people is more dependent on their access to adequate food, safe and adequate water, proper sanitation and clean environment.

COMMUNITY HEALTH CELL
47/1, (First Floor) St. Marks Road
BANGALORE - 560 001

While we support the over all perspective and approach of the new National Health Policy Statement and demand its proper implementation, we believe that a *'Rational Drug Policy'* is an integral part of a good *National Health Policy.*

We therefore, demand the following :

1. We have a right to safe, essential, quality drugs which are in keeping with the health needs of the people, at costs which the majority can afford.

2. We urge our government to accept and implement the Hathi Committee Recommendations which are also in keeping with the WHO Guidelines for a Rational Drug Policy.

3. Further the national drug formulary should be revised and compiled by an expert multi disciplinary committee keeping the following criteria in mind;

   Essentiality

   Efficacy

   Safety

   Cost

   Ease of administration

   Availability

   Potential for misuse.

   Such evaluation of the drugs in the market and revision of the lists should be done periodically.

4. The Essential Drugs Policy should be adopted for all health services government and private, and priority in production, distribution and dispensing should be given to these essential drugs.

5. The public sector should produce essential and life saving drugs on a priority basis at the national level.

6. Drug production by multinationals and private manufacturers in India should also be aligned with national health priorities.

7. Bulk procurement of essential and needed drugs should be through world-wide competitive tenders and rationalization of drug purchases should govern both the public sector as well as private health sector.

8. Imports and production of non essential, specially hazardous drugs, should be strictly curtailed.

9. Drugs which have been banned from sale after being marketed for some time in one country may not be submitted for clinical trial or marketing in India. The onus of proving why a non-essential drug should be introduced or allowed to continue on the market should be with the manufacturer and such introduction should be proceeded by adequate trials and evaluation by Drug Control Authorities.

10. Comprehensive drug legislation which covers areas such as price control at different levels, patents, and marketing practices should be incorporated to serve the objectives of the national drug policy and there should be no levies, sales tax or excise duty on any pharmaceutical product in the essential drugs list by the Central or State governments.

11. No technology transfer agreement shall be legal and binding which contains restrictive practices, disproportionate and unnecessary use of imported intermediaries or obselete technologies or unfair arrangements with respect to prices, payments or repatriation of profits.

12. The National Drug Policy should state clearly the steps towards a complete abolition of brand names and as a first step use of generic names should be made compulsory in medical education, prescribing and labelling of drugs. Generic names should appear more pominently on all packagings.

13. It shall be the primary responsibility of the manufacturer to ensure the quality of drug products. However, it shall be the statutory responsibility of the Drug Control Authorities to moniter the standards and ensure a minimum uniform level of government control. Consequently, the government shall take all necessary measures to enable the Drug Control Authorities to function in an effective manner and discharge the statutory duties cast upon them.

14. It shall be the statutory duty of the drug control authorities to inform health personnel and consumers of the essential drugs lists, policies, categories or brands of drugs banned for manufacture or sale, through publication in the national newspapers, magazines, medical journals with adequate explanations and details.

15. Availability of drugs required in the Governments National Programmes should be ensured on a priority basis to the government as well as voluntary and private health institutions. Quotas for anti TB, anti leprosy, anti malarial drugs, iodized salt etc. should be made easily available with regularity of supply to the voluntary health institutions wherever possible, specially when their performance, in health care delivery is known to be effective.

16. In all review committees, statutory bodies and other such bodies, there should be adequate representation of consumer groups and voluntary health sector.

17. Drug companies should follow ethical marketing practices, and this should be ensured by their own organizations like OPPI, IDMA, IFPMA. We deplore the tendency of these companies and associations to get around every progressive measure of the government through recourse to technicalities of the law and through the courts.

18. The marketing code drawn up by HAI (Health Action International) should form the basis for a National Code for Marketing Practices. This should be accepted by our government and should be suitably implemented through legislation.

19. The government of India should take a lead and endeavour to influence the WHA and WHO to adopt the Code in the interests of the other developing countries and their peoples.

(IFPMA and HAL Code attached)

— Voluntary Health Association of India

— Centre for Science and Environment

— Centre of Social Medicine and Community Health—Jawaharlal Nehru University.

— Catholic Hospital Association of India

— Kerala Sahitya Shastra Parishad

— Medico Friends Circle

— Arogya Dakshata Mandal

— Lok Vigyan Sanghatana

— Consumer Guidance Health Services

— Consumer Education Research Centre

— Federation of Medical Representative Association of India

— Health Services Association, Calcutta

— Drug Action Forum, Calcutta

— West Bengal VHA

— Andhra Pradesh VHA

— Drug Action Forum, Hyderabad

— People's Participation in Science & Technology Madras, Bangalore.

90.12

Tel: 310694, 322064

Catholic Hospital Association of India

CBCI Centre, Goldakkhana, New Delhi 110001

SECOND ANNOUNCEMENT

41st Annual Convention of CHAI and Workshop on Drug Issues.

1. Programme

23 (Friday) to 25 (Sunday) November 1984 : Meeting on —
"TOWARDS A PEOPLE ORIENTED DRUG POLICY"
26 (Monday) November 1984 : Annual General Body Meeting.

2. Venue

St John's Medical College, Bangalore 560 034.

3. Participants

Members of CHAI and special invitees.

4. Theme

The Indian Council of Medical Research and the Indian Council of Social Science Research have warned in their "Health for All" report that "*Eternal vigilance is required to ensure that the health care system does not get medicalised, that the doctor-drug producer axis does not exploit the people and that the abundance of drugs does not become a vested interest in ill-health*". This meeting is to understand the issues relevant to drug prescribing, drug distribution and pharmacy policy in our institutions in the context of the above warning.

5. General Objectives

5.1. To inform and make aware the CHAI members of the background to the above problem highlighted by the Indian Council of Medical Research/Indian Council of Social Science Research.

5.2. To challenge them to participate in the growing national response to the problem through a —
   a) continuing study of the problem;
   b) commitment to action at an individual, institutional, regional and national level.

5.3. To do this in the light of CHAI's new vision and in keeping with the Church's option for the poor.

6. Specific Objectives

WHAT IS THE PROBLEM ?

6.1. To create an awareness of —
   a) the health situation in India
   b) the role of drugs in health care
   c) the pattern of drug production in India vis a vis the people's health needs
   d) the dynamics of the drug industry
   e) the patterns of drug distribution/availability in the health system
   f) the national drug policies and laws.

6.2. To create an awareness of the growing —
   a) irrational use
   b) over use
   c) misuse of drugs by health personnel

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6.3. To look at the above issues within the context of the *CHURCH HEALTH SERVICES.*

6.4. To try and understand the problem from the people's point of view.

HOW/WHY THE PROBLEM ?

6.5. At the broader level to discover the social, economic, political, cultural and other factors responsible for this problem.

6.6. At a personal level to discover how all of us are part of the problem at the individual and the institutional levels.

WHAT TO DO TO TACKLE THE PROBLEM ?

6.7. To consider the various responses at national/international levels by groups/institutions/governments in the areas of —

a) consumer awareness and people's movements

b) continuing professional education

c) pressure groups on policy makers

d) search for low cost alternatives

e) individual/group action

f) institutional policy changes

6.8. To discuss ways and means by which participants can respond to this problem at

a) individual,

b) institutional, and

c) regional/national levels

and identify ways and means by which follow up action will be taken on this growing commitment.

AN APPEAL

We request all member hospitals and dispensaries to send representatives who are involved with drug prescribing and or pharmacy policy in their institutions. These may be doctors/nurses/pharmacists or policy makers.

A preparatory check list of how to study the drug situation in your institution will be featured in the special issue of MEDICAL SERVICE—October-November 1984. Participants should use it to study their local situation so that their participation will be more meaningful. The special thematic issue will also give adequate background material for the meeting.

— EXECUTIVE DIRECTOR
Catholic Hospital Association of India

* For further information/suggestions on the theme, write to :

Drs Ravi & Thelma Narayan
Community Health Cell
326, 5th Main I Block
Koramangala, Bangalore 560 034.

* For further information on registration/accommodation/ticket arrangements etc., write to :

Sr. Anna Maria
Secretary
CHAI Annual Convention Committee 1984
St. Martha's Hospital, Nrupathunga Road
Bangalore - 560 009.

Group Discussion on Prescribing Policy - Groups B1 & D1

Questions to be pondered about !

1. Can a Hospital devise a formulary of good quality, low cost medicines?

   Can this be common for all Voluntary Hospitals?

2. How can prescribers' compliance be ensured or is freedom of prescribing likely to make this impossible?

   Can we ensure Health Workers' compliance with their formulary (medicine list)?

   Will doctors also prescribe from this list?

   Is it possible to prevent prescriptions to medical shops being given?

3. Where simple low cost drugs will not be sufficient, how do we subsidise to all or those who need help most?

   Should all patients contribute to the cost of medicines? If so, how?

4. Will a Pharmacy Committee, including Doctors, Administrators and Pharmacists help in implementing cost control or quality control policy? (In most Hospitals medicines are the second largest item of expenditure!)

5. Have we asked our pharmacists to research costs? If so, does he know how to do so?

   Have we provided tools for the job? If so, what tools?

6. Are bulk drugs purchases possible on a group of Hospitals-base? What methods can we devise for obtaining low cost drugs either for one or many Hospitals?

7. Do we consider proper stock control, record keeping and auditing of medicines, purchase and distribution:

   a) unnecessary expenditure b) essential?

   What are our reasons for our attitudes?

8. In many Hospitals the Pharmacy is an important income producing section. Will a switch to low cost drugs raise cost or make it instead a burden on the Institution?

9. Is the production of medicines in the Pharmacy :

   a) too time consuming

   b) too costly in terms of personnel or equipment

   c) uneconomic?

   (Broadly thinking of two types: non sterile prescriptions and sterile prescriptions) How would you advise your Hospital Management?

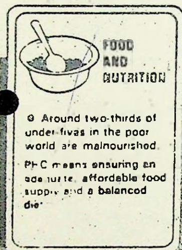
Primary Health Care

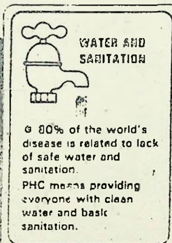
90-14

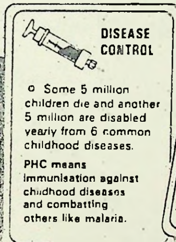
In the game of life and death many people in the world are playing against the odds:

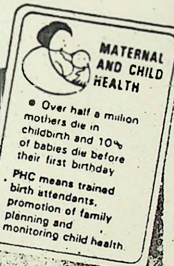
- 1 in 2 never see a trained health worker
- 1 in 3 are without clean drinking water
- 1 in 4 have an inadequate diet

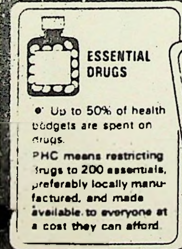
Every year diarrhoea kills 5 million under-fives; malaria kills one million people in Africa alone. These and other killer diseases are preventable. Doctors and hospitals offer cures for some. But what can really change the survival odds is a package known as Primary Health Care (PHC).

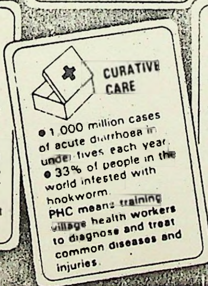


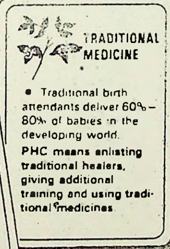


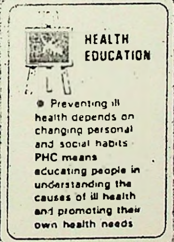












THE WINNING HAND

The eight elements of Primary Health Care give everyone – young children and poor people especially – the best chance of winning the fight for life.

The cost of putting PHC into practice worldwide is an extra $50 billion a year: less than two-thirds of what the world spends on cigarettes, and only one-fifteenth of world military expenditure.

From: WHO press kit, 'Progress in primary health care: review of a study', 10.10.83

ESSENTIAL DRUGS NEEDED AT THE COMMUNITY LEVEL

90-13.

	NAME OF DRUG	USE
1.	Aspirin	As analgesic, as antipyretic, in rheumatic arthritis, etc.
2.	Chloroquine	In malaria, amoebiasis, giardiasis, taeniasis (tape worm infestation), in the acute manifestations of lepra reaction, etc.
3.	Sulphonamides	In bacillary dysentery, urinary tract infection, meningococcal meningitis, chancroid, trachoma and inclusion conjunctivitis, etc.
4.	Streptomycin	In tuberculosis, urinary tract infections,meaningitis, bacteriemia and bacterial endocarditis, respiratory tract infection.
5.	Penicillin	In respiratory tract infection, rheumatic fever. meningitis, osteomyeelitis, otitis media etc.
6.	Isoniazid	In tuberculosis.
7.	Thiacetazone	In tuberculosis.
8.	Dapsone(DDS)	In leprosy, P.Falciparum (malaria)
9.	Piperazine	In roundworm infestation, also in threadworm infestation.
10.	Mebandazole	Anti-helminthic
11.	Diodohydroxyquinoline	In amoebiasis.
12.	Metronidazole	In intestinal and hepatic amoebiasis, trichomoniasis, giardiasis, etc.
13.	Ferrous sulphate	In iron deficiency. anemia.
14.	Vitamin A	In Vitamin A deficiency, prophylaxis, etc.
15.	Vitamin B Complex	In generalised avitaminosis B, or deficiency of any vitamin of B-Complex group as in prophylaxis
16.	Thiocarbamazine	Filariasis.
17.	Sulphur ointment	In scabies, psoriasis, ring worm infestation, lupus erythematosus, etc.
18.	Oral rehydration salts	In dehydration

These essential drugs are in keeping with the present disease pattern in the country but are available in very limited quantities, There is no official study estimating the actual requirement of these for the country as a whole.

Source: Health for All an alternative strategy.

COMMUNITY HEALTH CELL

326, V Main, I Block
Koramangala
Bangalore 560034

To:
The Members of the Faciliation Team

26 OCT 1984

Dear

Further to our letter of 12th September 1984, we had the first meeting of the facilitation team (for the CHAI Annual Meeting on 'TOWARDS A PEOPLE-ORIENTED DRUG POLICY'), on 6 October 1984 at St John's Medical College. There were some interesting preliminary discussions and it was decided that a short Workshop would be held on 3 Nov 1984 for the members of the facilitation team to bring them up-to-date on all the information relevant to the theme of the Workshop and also to decide together further details of the dynamics of the CHAI annual meeting on 24-25 November 1984.

I. Details of the meeting

Date: Saturday, 3rd November 1984

Time: 11.00 am to 6.00 pm

Venue: Rooms 116-117, Ground Floor, St John's Medical College, Bangalore

Programme

To identify as a team:

(a) What is the problem

i. Drug Policy in India Vs. Health Situation
ii. Irrational use, overuse, misuse of drugs

(b) Why/how the problem

Social, economic, political and cultural factors responsible for the situation at -

i. broader level - national
ii. personal level - institutional/professional

(c) What has been done to tackle the problem

:consider various responses at regional/national/international levels in the areas of--

1. consumer awareness and opeople's movements
2. continuing professional education
3. pressure groups on policy makers
4. search for low cost alternatives
5. individual/group action
6. institutional policy changes

II. Preparation/Background

(a) You must have received the following background papers:

1. Drug Pushers or Healers
2. Consumer Alert--Consumer Action

3. Towards a People-Oriented Health Policy (a Bangladesh Case Study)
4. Community Health Programme : The new vision of CHAI
5. CHAI Annual Convention : Second Announcement, giving details of general/specific objectives of Workshop
6. MEDICAL SERVICE (CHAI monthly)--MAY-JUNE, JULY, AUG issues (refer People, Pills and Prescription column).

(b) The following eight papers will reach you hopefully before the 3rd Nov 84 from the Voluntary Health Association of India, New Delhi:

1. Our concern about drugs
2. Hazardous, banned, bannable and dumped drugs
3. Rationality in banning fixed dose combinations
4. Essential drugs - a demand for prioritization
5. Scientific scrutiny of some over the counter drugs
6. Memorandum
7. Criteria of a Rational Drug
8. Drug Pricing and Pricing Policy

(c) Three journals which highlight the problem recently -

1. World Health, July 1984; 2. The Herald Review, 7-14 Oct
3. The Journal of CMAI, September 1983

(d) Copies of all the above materials and some other key papers and publications of World Health Organization and Drug Action Network (India) have also been kept aside at a counter in the St John's Medical College Library. You can contact Mr K N Kittur, the Librarian, to refer to them.

Do find time to look through as much of the material as possible. Even a cursory perusal would be a helpful preparation for the Workshop of the 3rd Oct 84.

For any further questions/suggestions, kindly contact us (Phone 565484). Please intimate your participation or otherwise.

Looking forward to meeting you on the 3rd,

Yours sincerely,

Ravi and Thelma

PS: Lunch and tea will be provided

Copy to:
1. Fr Percival Fernandez, Secretary, CBCI Society for Medical Education, St John's Medical College
2. Dr GM Mascarenhas, Dean, St John's Medical College
3. Fr Bernard Moras, Administrator, SJMCH
4. Dr AFA Mascarenhas, Medical Superintendent, SJMCH
5. Br Vincent, Administrative Officer, SJMC
6. Fr Claude D'Souza, Rector, St Josephs, Bangalore
7. Fr John Vattamattom, Executive Director, CHAI
8. Sr Anna Maria, St Martha's Hospital, Bangalore

THE DRUG SELECTION PROCESS

* How many different drugs are available? What is the range of drugs currently available? Are there 'duplicate drugs' -- many different drugs all of which serve the same purpose? Are there combinat -ion drugs for problems which could readily be treated with single drugs?

* How are the drugs selected? Is there a formalized process or is it informal? What criteria are used? Is cost a factor?

* Who selects the drugs and other pharmaceutical products for public health programs? The indi idual practitioner? Local health districts? Hospital pharmacists or therapeutic committees? A procurement clerk at the national level? A national committee? A physician? A pharmacist?

* Are drugs bought by their medical(generic) name or by their commercial (brand) name? Do pharmacists and medical practitioners understand the difference be ween generically-named drugs and brand name drugs?

* Are traditional medicines and local remedies available in goernment health programs? If so, how are they selected for inclusion?

* What kinds of drug information are available? Is the information up to date and unbiased? Do pharmacists and medical practitioners know where to look for information about drugs?

Source: Managing Drug Supply: Management Sciences for Health, pp.52

DISPENSING POLICIES AND PRACTICES

* What conditions exist at dispensing points? How are drugs handled? How accurately and cleanly are drugs dispensed? How concerned are health officials and health workers about the quality of compounding and dispensing practices?

* How often are patients improperly or infeffectively treated because their medicines have been improperly compounded or dispensed, or because drugs have deteriorated in inadequate packaging?

* At each level in the health care system, whois responsible for the compounding and dispensing of drugs? What training do these individuals have in the principles and practices of drugs compounding and dispensing? How much supervision do these indivudlas receive?

* What types of pharmaceutical training are available in the country? Are there standardized education curricula for pharmacy personnel? Are experience requirements for dispensers spelled out and reasonable, given the numbers and geographical distribution of individuals meeting, or eligible for meeting, these requirements?

* What resources exist to attract sufficiently educated individuals to pursue dispenser training and to what extent can these individuals expect satisfactory remuneration for the services they provide after completing their training?

* Are wages and salaries adequate to effectively dissuade dispensers from engaging in the illegal sale and distribution of pharmacueitcals?

* What kinds of packaging are used to dispense drugs to patients? Is there any mechanized repackaging into course-of-therapy packets? In light of losses from poor packaging and the costs of proper packaging, are there cost-effective alternatives to present packaging methods? Could more expensive containers be recycled?

Source: Managing Drug Supply: Management Sciences for Health, p.430

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Source: Managing Drug Sup ly: Management Sciences for Health, p.430

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PRESCRIBING PRACTICES OF MEDICAL PRACTITIONERS

* What are the prescribing habits of health workers like? Are expensive or brand name drugs used when less expensive drugs would provide comparable efficacy and safety? Are drugs dispensed for conditions on which they have no therapeutic effect (such as antibiotics for the common cold)? Are two or more drugs used when one drug would do the job? Are drugs generally used for the correct indications? In the correct dosages?

* What training do physicians, community health workers, and other medical practitioners receive in pharmacology and therapeutics? Is this training adequate in terms of its content and length? Is this training reinforced in practice?

* Are there local treatments of choice or standard norms for treatment? If not, would such norms help improve drug use? If treatment norms exist, howwere such norms established? What sources of information and advice were used to determine the norms? Are the treatment norms followed?

* What materials are available to practitioners for reference on therapeutic indications, dosages, or side effects? Are these materials published by drug companies? By scientific bodies? Are there any locally written therapeutics manuals?

* How do medical practitioners learn about new drugs? Through drug company representatives? Through local drug news periodicals? Through specialists, colleagues, or superiors?

* Are physicians, community health workers, and other medical practitioners aware of drug costs? Is cost a consideration in prescribing decisions? Is drug cost mentioned in medical and auxiliary training?

* Are prescribing privileges limited by the prescriber's level of training or by the type of health facility dispensing the drugs? If not, would such limitations improve drug use? If so, are these limitations reasonable? Do they allow practitioners to function within their levels of expertise, without exceeding the limits of their training or ability?

* Are there local hospital, district, or regional drug committees which review drug selections and drug use patterns at various health facilities? If so, what are the responsibilities and duties of these commi tees? How active are they in promoting judicious economical drug use? Who serves on the committees?

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* Are there limits on the amount of medication that can be dispensed at any one time? Are these limits reasonable or do they result in suboptimal treatment or potentially serious diseases?

Source: Managing Drug Supply: Management Science for Health, p.402

90.17

DRUG ACTION FORUM, WEST BENGAL

S/3/5, Srabani, Sector-III, Salt lake, Calcutta: 700 064.

ANNOUNCEMENT

Dear Doctor..................

Of the drugs that are being marketed in our country, approximately 60% are either unscientific, harmful, substandard or banned. Doctors have to depend mainly on the drug companies for information about drugs. Tall claims (often false) are made by drug companies about these drugs while all the harmful side effects and constraindications are not placed before the doctors.

Drugs Action Forum, West Bengal is going to publish a quarterly journal on Drugs and Rational Therapy which will also contain informations on harmful, banned and unscientific drugs. The journal will function under the guidance of an advisory body comparising of some members of All India Drug Action Network (AIDAN) and other noted doctors of the country. Doctors and health personnal are likely to be benefited.

Annual Subscription Rs. 12.00 (Four issues).

Bank drafts in favour of Drug Action Forum, West Bengal or Money orders for subscription may kindly be sent to the following address: (Please do not forget to mention your name and address in M.O. coupon).

Dr. P.K. Sarkar, Editor
JOURNAL OF DRUG ACTION FORUM, W.B
254, Block-B,
Lake Town, Calcutta: 700 089.

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ARE YOU HARMING YOURSELF ?

BRAIN TRUST ON HEALTH ISSUES.

It is the responsibility of the consumers to learn the hazards of drugs and chemicals used in daily life, not only to safeguard themselves but to work collectively so as to free policy makers and manufacturers to remove definitely harmful drugs and chemicals from the market or to devise an effective warning system so that these substance are not misused. The message was strongly conveyed by the members of panel of Brain Trust Society of India at Indian Merchants Chambers, Committee room on 18th March 1984. Members of panel included Dr.Pawan Sureka,Chairman of Medical Committee of Consumer Guidance Society of India, Dr.T.R.Motwani a Senior Surgeon at Jaslok Hospital, Dr.S.Adranwala.President of Bombay opthalmologist's Society, Dr.Dinesh Daftary, a dental surgeon and Honorary oral pathologist at Tata Institute of Fundamental Research, Dr.W.S.Rane Joint Honorary Secretary of Bombay Arogya Dakshata Mandal, Dr. G.S.Hathi, a Child Specialist and Mr. N.G.Wagle, Consultant chemical Technologist.

PAIN KILLER DRUGS.

Analgin, an pain killer drug (Novalgin,Baralgan,Ultragin, Neurolion etc.) can cause damage to bone marrow causing deficiency of white blood cells, "Agranulocytosis," a potentially fatal condition. A doctor who had himself taken just two tablets containing analgin, developed agranulocytosis and could survive with difficult after a fight of nearly six months under intensive medical care. Analgin has been banned in number of countries including Bangla-Desh but continues to be manufactured even by public pharmaceutical companies and is freely available in the market without any warning system to consumers. Pain is a subjective phenomenon and certain natural methods like taking rest, message with gentle hands, going out for a walk, diversion of mind etc., are preferably to taking drugs. Similaraly sponging of the body with water or ice cold packs are better for symptons relief of fever and should be used as a primary measure. Fever is basically body's defense mechanism and stress should be on proper diagnosis of cause of fever and specific treatment of that cause.Paracetamol(metacin, Crocin, Pyrigesic etc) is relatively safe drug and can be used for relief of pain or fever. Asprin another drug(e.g. Disprin) when taken should be consumed with a glass full of water or milk and preferably after food. Unfortunately the market is being flooded by drug combinations of either useless or harmful medicines and it may sometimes difficult to get single drug preparation.

Source: CGSI

90-19

The World Health Organization says:
"A number of medicines, which are of no value and are even dangerous, are often given to treat diarrhoea. Money and time are wasted in their use." So . . .

WHO says LOMOTIL has NO VALUE?

LOMOTIL (diphenoxylate/atropine) is made by the US multinational drug company, G.D. Searle; and promoted to physicians all over the world in terms such as "established success", "good tolerance", "excellent value" and "ideal for every situation". This leaflet — prepared and published by Social Audit Ltd., and friends* — calls into question these claims.

LOMOTIL may be of value in giving *symptomatic* relief for non-specific "travellers' diarrhoea" in adults. But experts say Lomotil — and other products like it[2] — have little or no place in the treatment of young children — especially in developing countries, where infective diarrhoeas are the major cause of death in children aged under three.[1] Lomotil's limitations include:

POTENTIAL DANGERS

"Lomotil, which is widely used in the treatment of diarrhoea in the paediatric age group, is dangerous and unwarranted . . . we urge that all physicians treating infants and children avoid the potentially dangerous use of Lomotil for the treatment of diarrhoea."
(Clinical Notes [1974])[3]

"Lomotil can relieve the symptoms of acute gastroenteritis in children, but it can also mask the signs of dehydration and cause fatal toxic reactions . . . use of this combination for treatment of diarrhoea in children is hazardous."
(The Medical Letter [1980])[4]

"Lomotil is a dangerous combination of drugs contra-indicated for children under 2 years of age and probably never indicated in childhood diarrhoea."
(Pediatrics [1980])[5]

QUESTIONABLE USEFULNESS

"The use of Lomotil as an antidiarrhoeal agent in children is difficult to justify . . . we doubt if it has any place in the treatment of diarrhoea in children."
(Arch. of Dis. in Child. [1979])[6]

"A diarrhoea that needs 4 such tablets to be cured would probably have been cured without it too. A more prolonged diarrhoea needs proper investigation and specific therapy rather than a blindly harmful stopcock."
(Leb. Med. J. [1974])[7]

ECONOMIC WASTE

Lomotil costs up to 25 times more than other widely-used symptomatic treatments for diarrhoea.
(AMREF [1980])[8]

"Lomotil (no value)." (WHO [1976])[1]

N.B. The use of 'Lomotil' in India in children below six years is now officially banned.

Lomotil

HOW USEFUL . . .

"The management of acute diarrhoea in childhood is essentially dietary . . . Unnecessary drug prescription for these chidren should be vigorously opposed."
(The Lancet [1976])[9]

. . . Against Dehydration?

"The cause of death in diarrhoea is DEHYDRATION . . . Diarrhoea is the most common cause of death in children under three years of age . . ."
(WHO [1976])[1]

LOMOTIL is not a treatment for dehydration. It may reduce the loss of fluid from the body but can also allow fluids to accumulate in the paralysed gut.

"LOMOTIL can mask fluid losses without diminishing them, and the drug itself can cause fatal adverse effects . . . there is no evidence that reduced motility diminishes the loss of fluid and electrolytes into the lumen of an inflamed intestine."
(The Medical Letter [1975])[4]

The accumulation of the body's vital fluids within the intestine can be just as dangerous as the more obvious dehydration:

"In diarrhoea, life-threatening situations are reached . . . so long as fluid and electrolytes are excessively lost into the lumen whether they are expelled from the lumen to the outside of the body or not . . ."
(J. of Singapore Ped. Soc. [1976])[10]

Small feeds of water (or a weak electrolyte solution) given frequently by mouth is the *only* first-line treatment against serious childhood diarrhoea. If this fails after 24 hours, intravenous therapy and hospitalisation may be needed.

. . . Against Infection?

"Acute diarrhoea in children is usually infective, but antibiotics and anti-diarrhoeal drugs rarely help."
(Drug and Ther. Bulletin [1978])[11]

LOMOTIL is widely and often successfully used by adults as a symptomatic treatment of bothersome, non-specific "travellers' diarrhoea" (which is rarely serious). But in children infective diarrhoea is serious. LOMOTIL prevents the child from getting rid of the infective agent and may prolong the period of infection.[12]

"In patients with infective diarrhoea, the use of constipating agents make the carrier state last longer by stopping the organism from being excreted."
(AMREF [1980])[8]

A comparison between LOMOTIL and a placebo in treatment of an infective diarrhoea reported that:

"Febrile volunteers receiving Lomotil alone experienced over a day more fever than those in other treatment groups," suggesting that **"drugs that retard gut motility may facilitate intestinal infection . . ."**
(JAMA [1973])[13]

HOW SAFE?

"Because of its depressant effects it is no longer recommended for children."
(Brit. Med. J. [1976])[14]

LOMOTIL poisoning in children can include atropinism, respiratory depression, coma, and even death. Symptoms can appear even at near therapeutic doses:

"Lomotil ingestion is a cause of serious poisoning in young children, especially those aged under five. It is always hard to assess the dose in patients suffering from poisoning, but it seems that young children may develop pronounced symptoms after taking only one to five tablets."
(Brit. Med. J. [1977])[15]

The difference between therapeutic and toxic dose is unpredictable:

"We were unable to find a correlation between the severity of symptoms and the dose ingested. Because of this it is not possible to predict what dose will be toxic in children, and while some may have only the mildest symptoms with relatively large doses, others develop severe toxicity on ingesting an amount near the normal dose."
(Arch. of Dis. in Child. [1979])[6]

"There is a very narrow range between allegedly therapeutic and toxic dosages, and many cases of toxicity in children have been reported."
(Pediatrics [1980])[5]

"The narrow margin between therapeutic and toxic doses, and the high incidence of atropine hypersensitivity, make Lomotil a potentially dangerous therapeutic agent."
(Clinical Notes [1974])[3]

"The dangers of this drug to children have not been well recognised. The narrow range between therapeutic and toxic doses, and also the possibility of a child being abnormally sensitive . . . may account for the severe toxicity sometimes seen with low dosage."
(Clinical Pediatrics [1973])[16]

<u>DESPITE THE DANGEROUSLY VARIABLE RESPONSE, SEARLE'S RECOMMENDED DOSES FOR INFANTS AND CHILDREN AND THE PACKAGE WARNING INFORMATION VARY AROUND THE WORLD.</u>

In the US, LOMOTIL is contra-indicated for children under two years old.

"This warning by the manufacturer is not because there has been inadequate paediatric testing of the drug but rather because severe life-threatening reactions (which <u>are not</u> rare) occur in this age group."
(Am. Fam. Phys. [1976])[17]

In Britain, however, the makers recommend it for one-year-olds; and in Hong-Kong, Thailand, and the Philippines it is offered for infants of three months old.

Special circumstances in developing countries compound the potential danger of treating infants with Lomotil in this way. In developing countries:

- children are relatively lighter than those of the same age elswhere;
- the amount of medical supervision is greatly lower;
- typically, no adverse reaction reporting systems exist; and
- drugs such as LOMOTIL (available only on prescription in the West) are in practice freely available over the counter.

HOW EXPENSIVE?

The cost of the smallest available size of LOMOTIL would for many people in developing countries be equivalent to at least one day's income. Other effective preparations for symptomatic treatment of diarrhoea[18,19] cost much less.

According to the African Medical and Research Foundation (AMREF), the cost of treatment with LOMOTIL is about twice the cost of treatment with codeine syrup or codeine phosphate. Treatment with a kaolin mixture, which may also give relief[20], costs about 25 times less.[8]

LOMOTIL WITH NEOMYCIN (an antibiotic) is recommended by Searle for the treatment of "diarrhoea of bacterial origin." This is unacceptable:

"Antibiotic and sulphonamide preparations should be <u>avoided</u> for the treatment of diarrhoea even when a bacterial cause is suspected because they may prolong rather than shorten the time taken to control diarrhoea and carrier states."
(BNF [1981])[21]

"Neomycin not only can cause renal damage, but also it makes diarrhoea, dehydration, and nutritional losses worse and could interfere with oral rehydration therapy."
(Population Report , 1980)[22]

"Medicines which should not be used in the treatment of diarrhoea: . . . Neomycin . . ."
(WHO [1976])[1]

Treatment with LOMOTIL plus NEOMYCIN costs about three times more than treatment with LOMOTIL alone.

REFERENCES:

1 World Health Organization: **Treatment and Prevention of Dehydration In Diarrhoeal Diseases** (A Guide for Use at the Primary Level) (Geneva: WHO, 1976). LOMOTIL is one of 9 treatments not recommended.
2 The same preparation is sold by Janssen Pharmaceutical Ltd. and known as "Reasec". Other proprietary names: Diarsed (Fr.); Retardin (Swed.). (Source: Martindale's Extra Pharmacopoeia, 27th Edition).
3 Drake M E, & Drake M E Jr.: "Lomotil Intoxication in Pediatric Patients" (in) **Clinical Notes** (June 1974) pp. 501-2.
4 "Lomotil for Diarrhoea in Children" (in) **The Medical Letter** (iss. 25, 1975) p. 104.
5 "Delayed Cardiopulminary Arrest after Lomotil Ingestion" (in) **Pediatrics** (Jan 1980) pp. 157-8.
6 Curtis J A, & Goel K M: "Lomotil Poisoning in Children" (in) **Archives of Disease in Childhood** (iss. 54, 1979) pp. 222-5.
7 Uthman S M: "Some Complications of Diphenoxylate Hydrochloride with Atropine" (in) **Lebanese Medical Journal** (iss. 27/5, 1974) pp. 521-2.
8 Upunda G, Yudkin J, and Brown G: **Therapeutic Guidelines** (A manual to assist in the rational purchase and prescription of drugs) (Nairobi: African Medical and Research Foundation, 1980) p. 96.
9 "Drugs for Acute Diarrhoea in Childhood" (in) **The Lancet** (Nov. 20, 1976) p. 112.
10 Wong Hock Boon & Michael Toh Ho Sing: "Lomotil Poisoning" (in) **The Journal of the Singapore Pediatric Society** (April 1976) pp. 34-7.
11 "Diarrhoea in Children" (in) **Drug and Ther. Bulletin** (Jan 6, 1978) p. 2.
12 Pittman F E, "Adverse Effects of Lomotil" (letter to editor in) **Gastroenterology** (Iss. 67/2, 1974) pp. 408-9.
13 Dupont H L, & Hornick R B: "Adverse Effect of Lomotil Therapy in Shigellosis" (in) **Journal of the American Med. Assoc.** (Dec 24-31, 1973) pp. 1525-8.
14 Bell D R: "Diseases of the Alimentary System" (in) **British Med. J.** (Nov 20, 1976) p. 1240.
15 Penfold D, and Volans G N: "Overdose from Lomotil" (in) **British Med. J.** (Nov 26, 1977) pp. 1401-2.
16 Snyder R, Mofenson H C, & Greensher J: "Toxicity from Lomotil" (in) **Clinical Pediatrics** (Jan 1973) pp. 47-9.
17 Wasserman G S: "Lomotil Ingestions" (letter to editor in) **Am. Fam. Physician** (Oct 1976) pp. 27-8.
18 Smits B J: "The Irritable Bowel Syndrome" (in) **Practitioner** (July 1974) p. 43.
19 Collins C D: "Lomotil in Treatment of Post-Vagotomy Diarrhoea" (in) **British Med. J.** (Sept 3, 1966) pp. 560-1.
20 Portnoy B L, et al. "Antidiarrhoeal Agents in the Treatment of Acute Diarrhoea in Children" (in) **Journal of the American Med. Assoc.** (Aut 16, 1976) pp. 844-6.
21 British Medical Assoc. & The Pharmaceutical Soc. of G.B., **British National Formulary** 1981, No. 1, (London: The Pharmaceutical Press and the BMA, 1981) p. 40.
22 The Johns Hopkins University, "Oral Rehydration Therapy (ORT) for Childhood Diarrhoea" (in) **Population Reports** (Issues In World Health) (Nov/Dec 1980) p. 54.

* SOCIAL AUDIT AND FRIENDS

SOCIAL AUDIT Ltd is an independent non-profit making action-research unit, concerned with improving government and corporate responsiveness to the public generally. Its concern applies to all corporations and to any government, whatever its politics. Social Audit has reported and campaigned on a wide variety of public interest issues. Its interest in multinational drug companies and in development is reflected in this leaflet — with hopefully others to follow — and also in the publication of **Insult or Injury?** (An enquiry into the promotion of British food and drug products in the third world, 1979); and **Drug Disinformation** (What British and other multinationals tell doctors about their products at home and abroad, 1980).

This leaflet — for which Social Audit is wholly responsible — could not have been prepared and published without the generous support given by:

War on Want, 467 Caledonian Rd., London N7 9BE, and The International Organisation of Consumers Unions, Regional Office for Asia and the Pacific, PO Box 1045, Penang, Malaysia.

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90-20

The Crazy World of Tonics

Waterbury's Yellow Label Tonic, a brand leader in the Indian tonics market, contains only 3 milligrams of iron per teaspoon just 1/10 of which may be absorbed by the body. The Indian Council of Medical Research (ICMR) recommends atleast 10 milligrams for women. The producer claims that this tonic stimulates appetites and builds bodies. But chemical analysis has revealed that it has 10% alcohol content which is the real appetite-stimulant![1]

"The real culprits behind the 'tonic craze' are the manufacturers of such formulations. The principal reason for their hard selling of such products is the fact that the tonics and vitamins fall in 'category four' of the Drugs Price Control Act, which means that there is no limit on profits made on these preparations --. With easy pickings and a readymade market, no wonder then that every new company entering the pharmaceutical world wants to market its own brand of tonic rather than any life-saving drug![2]

Explaining how the 'tonic craze' is the result of systematic campaigns of the large companies, he says:[2]
"The first part of the plan was the mounting of an intensive sales campaign to influence doctors on the need for tonics in their day to day practice. This was followed by free sampling....."
"The other part of the marketing gimmickry in selling tonics was by directly advertising in the mass media, to catch the public eye. Slogans like "Do you feel tired at the end of the day? You need....". Or "A woman needs iron every day" gradually made a deep impact on the people until many were psyched into believing that they could not do without a tonic."

We have noted that these tonics are not consumed by the poor but

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COMMUNITY HEALTH CELL
47/1, (First Floor) ... Road
BANGALORE ...

mainly by the relatively rich whose ordinary diet adequately meets their vitamin and other requirements. In recent years, evidence has grown that the excessive vitamins may not simply be discharged by the body but may even cause severe disorders. Prolonged consumption of excessive vitamin C may form kidney stones, excessive vitamin A may cause diseases of the hair, skin and liver and vitamin D in excess may cause disorders of the kidneys and bones.[2]

Take this further example from South East Asia. In the U.K., Sanatogen is marketed as a 'nerve tonic' for old women who believe in its doubtful ability to tranquillise. But Sanatogen Powder is marketed to students in Malaysia who believe in its ability to stimulate their minds. "Worried about exams?" says the advertisement. Sanatogen will give you "greater energy and concentration". Can a drug both stimulate and sedate?[3]

Thus the sheer irrationality and deliberate exploitation of consumers through this sinister "tonic racket" is obvious. The fact that many such 'rackets' continue unabated is a measure of the enormous influence and power of the large pharmaceutical corporations not only in India but in many other countries, particularly the developing ones.

"The incidence of disease cannot be manipulated and so increased sales volume must depend atleast in part on the use of drugs unrelated to their utility or need, or in other words, improperly prescribed. Human frailty can be manipulated and exploited and this is fertile ground for any one who wishes to increase profits. The enormous sales of so-called tranquillisers are only a small part of the crop reaped from this ground. The pharmaceutical industry is unique in that it can make exploitation appear a noble purpose."[4]

References

1. Health for the Millions, VHAI, April-June 1981.

2. Manohar S. Kamath: Some Boost and at what Price? The Daily Magazine, 7 May 1981.

3. "The Impact of Multinational Corporations on Health in Developing countries" by Charles Medawat. Seminar on Health Food and Nutrition, Consumers' Association of Penang, Malaysia, 15-20 September 1979.

4. Drugs and the Common Man: Science Today, November 1970.

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90-21

DRUGS*

THE cost of modern drugs is invariably so high that an overwhelming majority of the Third World's population cannot afford to purchase them.

IN developed countries drug costs represent only 10-20% of the total health care expenditure. IN MANY DEVELOPING COUNTRIES PHARMACEUTICAL COSTS REPRESENT 40-60%. It is, therefore, important that ways and means be found to reduce the cost of drugs in developing countries.

THE first thing for any country to do, according to WHO, is to prepare a list of essential drugs which they can afford and which are needed to meet the basic health needs of the majority of the population. But by restricting imports to these drugs which meet most of the health needs, and abolishing the use of brand names for drugs in favour of generic non-proprietary names, countries can obtain large savings in drug costs. WHO's Basic Drugs List contains about 200 drugs, subject to modification for national needs, and according to the Mahler-Labouisse report to Alma-Ata, "the number needed for primary health care may be lower than 200".

UNCTAD (UN Conference on Trade and Development) has proposed that developing countries should increase their purchasing power against the large drug companies. They should centralise their drug imports via a single state-controlled Drug Buying Agency. Wherever possible, UNCTAD proposes that Third World countries should also try to join one another and combine their drug purchases. This will give them further bargaining power.

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*Source: PRIMARY HEALTH CARE: Earthscan Press Briefing Document No 9, July 1978 pp 33-34.

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SRI LANKA has tried such a strategy and obtained considerable savings.

SUCH regional purchasing agencies will take time to set up. In the meantime, UNICEF, which has a substantial drug purchasing programme of its own, offers to buy drugs on behalf of developing countries.

UNIDO (UN Industrial Development Organization) is meanwhile trying to help developing countries set up their own basic drug industries, at least for formulation (tabletting, capsuling, etc) and packaging drugs.

BOTH UNIDO and WHO feel that many drug needs can now be met by the judicious use and production of traditionally-used herbs. Many locally available medicinal plants can also become the source for local production of drugs.

WHERE possible, the UN agencies also propose that developing countries should cooperate to set up Cooperative Pharmaceutical Production and Technology Centres to produce drugs for regional markets and help in pooled procurement of drugs.

THESE ideas indicate the emergence of composite UN strategy to meet the pharmaceutical needs of developing countries.

THIS strategy is clearly in conformity with the New International Economic Order. It will also advance appropriate technology, and the process of technological cooperation among developing countries (TCDC).

....

COUNTRY PROFILES

Vietnam

Growth of plant-based pharmaceuticals.

Herbal gardens in villages.

State farms for medicinal plants.

40 new drugs from local herbs.

Sri Lanka

Bulk purchasing through State Pharmaceutical Corporation (1972).

Adopted limited list of drugs (600).

Restricted prescribing to generic names. (Multi-National Corporations (MNCs) blew up plan - 1978).

Pakistan

Generic prescribing (failed).

Bangladesh

1707 drugs banned (June 1982) in three schedules:

Schedule I : 305 banned immediately.

Schedule II : 134 banned after 6 months.

Schedule III :1268 to be manufactured locally.

(Modifications on pressures from MNCs through U.S.,British, Dutch, German embassies).

Mozambique

Restricted Drugs in Market.

China

Traditional Medicine and Herbal remedies promoted as part of drug policy.

50 herbal medicines included in policy.

Accupuncture promoted.

Bare-foot doctors.

quotes

1 "As commodities, prescription drugs behave differently from most other items: they are products that the ultimate consumer rarely selects for himself. The producer's sales effort are directed at the "instrumental consumer", the doctor who prescribes but does not pay for the product.....Physicians receive their most intensive in-service from agents of the Chemical Industry."

-- Ivan Illich in 'Limits to Medicine'.

2. "In 1973, the entire drug industry spent an average of $4500 on each practising physician (in U.S.A.) for advertising and promotion".

-- Ivan Illich in 'Limits to Medicine'.

3. Many developing countries have found that only 1 to 2% of the drugs on their markets are essential for meeting the basic needs of their people. The Joint Mission Hospitals Equipment Board Ltd (ECHO), which supplied essential drugs to christian mission hospitals around the world, found that about 25 generic drugs were adequate for most patients in some 98 hospitals all over the thirld world.

-- "Drugs and the Third World" Anil Agarwal

An Earthscan publication, 1978.

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4. As far as sub-standard drugs are concerned, there is an urgent need to tighten up the drug control machinery of the states. This will require larger resources in the form of trained personnel and fully equipped testing laboratories being made available to the states. The Food and Drug administration of the states need to be made more effective. It is well known that sub-standard and spurious drugs originate largely in those states where the drug control administration is ineffective.

-- Aspects of the Drug Industry in India
Mukaram Bhagat, 1982.

5 According to some estimates upto 80% of the present output of many foreign drug companies comprises of simple household remedies and inessential formulations. Essential drugs like insulin, anti-leprosy drugs, anti-TB drugs, vaccines etc., account for only 30% of the value of formulations sold by many large firms.

-- Drugs on the Market by Jug Suraiya
The Statesman, 8 December 1980.

6 On a world-wide scale, an estimated $2 billion are spent annually on Research and Development in drugs Of this, less than $70 million or 3.5% is spent on tropical diseases. At the same time, over 1 billion poor people or about 30% of the world's population are extremely vulnerable to these diseases.

-- Drugs and the Thirld World, Anil Agarwal

7 In India, at present, some 20,000 branded medicines are on the market, a large number of which are considered irrational. The basic bulk drugs used for their formulation number only 400. The Hathi Committee considered just 117 generic drugs (0.6% of the number of drugs currently marketed) sufficient for satisfying the basic requirements of the country.

-- Aspects of the Drug Industry in India,
Mukarram Bhagat

8 The Lavraj Kumar Committee, which investigated the profitability of multinational drug firms during the 1970's found that their research and development outlays accounted for only 0.83% of their total costs, with the exception of only 2 companies, against this, sales promotion, administrative overhead expenses accounted for 33% of their total costs.

--Foreign Drug Firms Spend Too little on R & D,
The Hindu, 12 March 1980.

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9 A peculiar feature of the drug industry is that the consumer is 'captive'. He normally does not possess sufficient knowledge to make his choice from a bewildering array of branded products available on the market. It is his physician who makes this choice for him. However, the confusion is no less for the prescribing physician too: it isvirtually impossible for him to make a rational evaluation of the thousands of price and quality alternatives the market is flooded with.

Further, most doctors can hardly find enough time to keep abreast of all the latest pharmacological developments in their respective fields through the scientific journals. Thus the doctors mainly depend on information provided by the large manufacturers as part of their promotional campaign. As one would expect, much of this information transmitted through beautiful pamphlets and company medical representatives (the ubiquitous salesman of the drug industry), is of doubtful objectivity. In the enthusiasm to promote their products, many 'ifs' and 'buts' of vital importance are simply left out in the promotional literature.

-- Aspects of the Drug Industry in India,
Mukarram Bhagat.

"The physician who sets about to treat a disease without knowing anything about it is to be punished even if he is a qualified physician; if he does not give proper treatment, he is to be punished more severely; and if by his treatment the vital functions of the patient are impaired, he must be punished most severely."

-- Koutilya Arthashastra

"There are two types of physicians:- those who promote life and attack diseases: those who promote diseases and attack life.

-- Charaka Samhita

One West African study showed that more appropriate prescribing could cut the drug bill by 70 percent. Most of this money could be spent on generic drugs, but this is resisted by the international drug companies who recruit leading doctors to their cause with little difficulty. These specialists, heavily involved in private practice, unite with the pharmaceutical companies under a banner of 'clinical freedom'.

-- David Morley, Professor of Tropical Child Health, University of London

Reporting in 1956 on the excessive amount of space taken up by advertisements in Indian newspapers, the Indian Press Commission commented:

"The largest field of.......Objectionable advertising which we feel should be put down by law is of drugs and proprietary medicines.......The volume of advertising of such commodities ranks next only to the volume of advertising of cosmetics."

-- Use and Misuse of the Media
Sumanta Banerjee, World Health, Feb-March 1983

"Because of the great differences between countries, the preparation of a drug list of uniform, general applicability and acceptability is not feasible or possible. Therefore, each country has the direct responsibility of evaluating and adopting a list of essential drugs, according to its own policy in the field of health."

-- WHO Technical Report Series No.615
Criteria for selection of essential drugs.

(Cartoons) copy

90-23

Visuals on Drugs

Sl No	Theme	Source	Suggested positioning
1.	The World's Best Medicine	UNICEF	After editorial
2.	Living in two Worlds	Church & Social Justice (CSA)	With CHD team's article
3.	Dumping	Helping Health Worker Learn	With article Misuse/overuse of medicines
4.	Rare Himalayan herb and multi-national pill for headache	Laxman cartoon Health Care Which way to Go (mfc)	With article Misuse/overuse of medicines
5.	Vicious cycle of medicine overuse	Helping Health Workers Learn	With medication as a substitute for caring
6.	Expensive yes	Laxman Cartoon Health Care Which Way to Go (mfc)	With or before Drug misuse in our hospitals
7.	Not to be taken worthless	HAI News June 1982	With "If there are no side effects this must be Argentina"
8.	Who says lomotil has no value	Social Audit Handout (first page only)	Before "Crazy world of tonics"

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Sl No	Theme	Source	Suggested positioning
9.	Doctor, I have taken the tonic	Health Care Which Way to Go? (mfc)	With "Crazy world of tonics"
10.	A person who eats well does not need extra vitamins	Health for the Millions April-June 1981	With "Crazy world of tonics"
11.	What is so new about sugar-salt solution?	Health Care Which Way to Go (mfc)	With 'ORT - what are the options"
12.	Judge with pharmacology book	The Herald Review, Oct 14, 1984	With legal education
13.	Bad information means bad medicine	Social Audit (Health for the Millions, April-June 1981)	With or before "Consumer Alert--Consumer Action"
14.	Remember medicines can kill	Helping Health Worker Learn	With "Towards a Rational therapeutics".

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EMBARGO 11.00 am THURSDAY, 25 NOVEMBER 1982

THE POOR SUFFER THROUGH MULTINATIONAL DRUG COMPANIES' MARKETING PROFITABLE BUT INESSENTIAL DRUGS IN THE THIRD WORLD, ARGUES NEW BOOK FROM OXFAM

The uncontrolled sale and promotion of drugs in most poor countries means that they often do little good and can be positively harmful. Major manufacturers are acting irresponsibly in the Third World by ignoring the needs of the majority and not taking responsibility for the safe use of their products.

Dangerous double standards have resulted in anabolic steriods being promoted as appetite stimulants for malnourished children; an antidiarrhoeal drug banned in Britain, because of possible crippling side-effects, is freely marketed in the Third World and sold without warnings. Antibiotics are sold on market stalls like loose sweets, encouraging misuse and drug resistance.

For the Third World poor, the cost of basic life-saving medicines is astronomical. The price of just twenty tablets of the top-selling antibacterial drug in Mexico would provide a family of four with their basic diet for two weeks. A small bottle of an antibiotic syrup costs a poor Bangladeshi family the equivalent of £35 to a British family earning £135 a week.

In Bitter Pills, Medicines and the Third World Poor, published by Oxfam on November 25, Dianna Melrose investigates these alarming facts from the perspective of the poor, drawing on her own field research, evidence from the manufacturers involved and Oxfam's wide experience of poverty and ill-health in the Third World.

The poor suffer disproportionately from ill-health. A few dozen essential 'generic' drugs could be used to save millions in the poorest countries from unnecessary suffering and death. The know-how to make these key generic drugs has been available for decades. We take them for granted in Britain, but the majority of the Third World poor are denied them because drugs are produced and sold for profit rather than on the basis of real need. The rich world dominates

drug production. Aggressive promotion means that the most expensive brand-name drugs usually sell best. The poor are therefore forced to pay unnecessarily high prices and subsidise new drugs for the rich.

Bitter Pills documents the abuses caused by weak controls and reveals that some manufacturers - including some based in Britain - are not as scrupulous as they should be in ensuring that Third World patients and prescribers get full information on their products. Some even resist moves to introduce tougher controls in the Third World that they must comply with in Britain.

The book describes some of the positive initiatives taken at local, national and international levels to rationalise the use of drugs as part of a broader strategy for better health - recognising that disease which is rooted in poverty can only be combatted by an onslaught on poverty itself. It documents the major obstacles that Third World governments face in trying to crack down on the drug market. Rich world manufacturers and their governments have lobbied to block changes that would benefit the poor.

Practical suggestions for change are addressed to three groups: Firstly, if the poor are to benefit, Third World governments must give priority to preventive and primary health care rather than to costly hospital services. The private drug market should be controlled to safeguard health and priority given to purchase and manufacture of essential drugs.

Rich world governments should actively encourage Third World governments to adopt the WHO recommendations which, in theory, they have supported. They could help Third World governments make informed choices about drug risks and benefits by making more information available at little cost, and introducing controls to discourage exports of dangerous and inessential drugs. Official health aid should not be tied to purchases of expensive products and high-technology medical services; and voluntary agencies should strengthen community health projects which do not rely on imported drugs.

Manufacturers should take full responsibility for ensuring that their products are used safely and effectively in the Third World and respond to the real health needs of the poor by marketing low-priced essential drugs.

Dianna Melrose, 30, the author of Bitter Pills, was born in Zimbabwe and grew up in Latin America. She holds an MA in Latin American studies from the London School of Economics and worked as a translator for banking and insurance firms in the City before becoming an administrator for the British Council. She joined Oxfam's Public Affairs Unit in January 1980 and has carried out field research in Bangladesh, India and the Middle East. She conducted research for a film on the marketing of baby milk and medicines in North Yemen and is the author of the associated book, The Great Health Robbery.

Bitter Pills - Medicines and the Third World Poor, by Dianna Melrose, is published by Oxfam on November 25 at £4.95. Distributed by Third World Publications. Review copies are available on request from the Press Office, Oxfam, 274 Banbury Road, Oxford. Tel: Oxford (0865) 56777.

For more information contact Derek Warren, Oxfam Press Office on Oxford (0865) 56777.

8th November, 1982

BITTER PILLS

MEDICINES AND THE THIRD WORLD POOR

by Dianna Melrose

Published by Oxfam on 25th November, 1982
Distributed by Third World Publications
151 Stratford Road, Birmingham, B11 1RD

INTRODUCTION

Throughout the Third World millions of the poorest have no access to life-saving drugs, while drugs are wasted and misused worldwide. In poor countries those that are most needed are often the hardest to obtain, at least at prices the poor can afford. Through their uncontrolled sale and promotion in most poor countries, medicines often do little good and can be positively harmful.

1. A PILL FOR ALL ILLS?

The poor in the Third World - as in Britain - suffer disproportionately from ill-health. Disease that is rooted in poverty can only be attacked by an onslaught on poverty itself. But a small number of essential drugs could be used to save millions of the poor from unnecessary suffering and death.

2. UNEQUAL DISTRIBUTION

The Third World has three-quarters of the world's population but accounts for little more than 20% of total drug sales. In the poorest countries, annual drug expenditure averages only 50p *per capita*, compared with £35 in the rich world. Yet this money may represent a crucial proportion of a poor family's income. Moreover, the distribution of health services is often grossly weighted in favour of the rich town-dwellers at the expense of the majority of people living in rural areas. The poor are therefore forced to rely on untrained drug-sellers offering potentially dangerous drugs at extortionate prices.

3. PRODUCER'S MARKET

Throughout the world, drugs are largely produced and sold by private businesses whose interests are primarily commercial rather than medical or social. Third World countries are almost totally reliant on importing finished drugs and so are subject to the dramatic price increases which follow inflation. Inappropriate patterns of drug consumption are adopted, thanks to the producers' aggressive

promotion tactics. In North Yemen, non-essential drugs, tonics and vitamin pills account for an estimated 65% of total pharmaceutical imports. Only 1.3% of imports are of drugs to combat the prevelant and crippling diseases of malaria, bilharzia and TB.

4. POOR VALUE FOR THE POOR? DRUG PRICES

In Third World countries, the cost of drugs in real terms is anything up to 20 times higher than in the producing nations. Expensive brand name drugs are marketed instead of far cheaper generics. Hefty overheads for promotion and research and development into new drugs are passed on to the poor. Meanwhile only a fraction of total research spending (equivalent to half the cost of developing one new drug) is allocated to poor world diseases. Poor people are therefore subsidising new drugs for the rich.

5. INFORMATION OR DISINFORMATION? DRUG PROMOTION

Drug promotion helps to ensure that 90% of drugs prescribed by GP's in Britain are brand-name products. But at least, in drug-producing countries, advertising is monitored and doctors are supplied with objective information about cost-effectiveness. Over-the-counter sales are also strictly controlled. Such restrictions rarely apply in poor countries, where misleading or inaccurate promotional literature goes unchecked and where company salesmen may offer free samples and other sales inducements to doctors and nurses on a lavish scale. Commercial pressure can be very intense: in Nepal, Brazil and several Central American countries, there is one doctor to every three salesmen (compared to eighteen doctors for every one salesman in the UK).

6. BUYERS BEWARE - UNCONTROLLED SALES AND PROBLEM DRUGS

All too often there is a cruel contrast between advertising claims and the reality of drug use in developing countries. Powerful drugs with toxic side-effects are dispensed by illiterate traders - even by children. The dangers are accentuated by irresponsible marketing practices. Amabolic steriods have been promoted as appetite stimulants for malnourished children. Powerful antibiotics have been marketed to treat infants with "common diarrhoea." Uncontrolled marketing and sales has already led to epidemics of drug-resistant disease.

7. TRADITIONAL MEDICINE

Traditional medicine is still the major source of health care for three-quarters of the Third World population. Some important modern drugs are derived from ancient herbal remedies. WHO has urged Third World governments to plan their health systems so that modern health-workers work alongside traditional healers - with each learning from the other, encouraging patients to visit the health centres more readily.

8. TRAIL-BLAZERS - SMALL-SCALE SOLUTIONS

A number of pioneering projects have attempted to tackle ill-health in poor communities with paramedics providing preventative and curative care. The People's Health Centre in rural Bangladesh goes beyond the confines of health care to try to solve the underlying problems of landlessness, inequality and powerlessness. Other projects in a range of developing countries are specifically aimed at finding imaginative solutions to the problems of lack of vital drugs and misuse of medicines.

9. HEALTHY SOLUTIONS - THIRD WORLD NATIONAL AND REGIONAL POLICIES

Sri Lanka, Mozambique, China and other developing countries have adopted national drug policies to cater for the health needs of the majorities. A wide range of policy options are open to Third World governments to improve the use and availability of drugs. The key element needed is political will. Increasingly developing countries are exploring the advantages of strength in numbers and pursuing joint pharmaceutical policies to improve their bargaining power with the rich world producers.

10. HELP OR HINDRANCE? - THE RICH WORLD'S RESPONSE

Drug-producing nations have a controlling interest in UN agencies such as WHO that could do more to assist developing countries. The British and other rich-world governments adopt different standards for drugs for export and give little active support to Third World governments attempting to implement bold new drug policies. They back home-based manufacturers' interests - sometimes at the expense of the poor. Leading drug manufacturers have made concessions to the special needs of developing countries, but they also bring powerful pressure to bear (even involving their governments) in blocking positive new controls on the drug market

in developing countries. This concerted industry lobby is active now in Bangladesh trying to get the government's new drug policy reversed.

11. HEALTH NOW - ACTION FOR CHANGE

The principal recommendations are addressed to three groups: Firstly, if the poor are to benefit, Third World governments must give priority to primary health care rather than to costly hospital building projects. Drug imports and sales should be brought under central control, and purchases made in accordance with health needs. Training for health workers should concentrate on methods appropriate to their countries' needs and resources

Rich world governments should take steps to ensure that the WHO recommendations with which they have, in theory, agreed are implemented. They should reappraise the need for export controls and publish all available information on drugs and their safe use. Official health aid should not be tied to purchases of expensive products and high-technology medical services; and voluntary agencies should strengthen community health projects which do not rely on imported drugs.

Manufacturers should be consistent in the standards they apply worldwide and adopt higher ethical procedures in disclosing full information and marketing drugs that are essential to the needs of the poor.

To Rani Narayan

LOCOST

LOCOST (Low Cost Standard Therapeautics) is a collective voluntary enterprise for rational therapeutics. LOCOST aims to promote low cost, scientifically tested medicines under generic names. LOCOST is a response to a growing demand and challenge of the voluntary health sector to meet the needs of the deprived sectors of society for not only low priced, but also good quality medicines.

History of LOCOST

In the last few years, voluntary agencies have been sensing an urgent need for a rational drug therapy structure. Some of the main reasons that led to this sense of urgency were: widespread irrational prescription practices with no social accountability; the unethical practices of the drug industry; the lack of a formal structure and network for low cost and quality medicines.

Despite seminars, commissions, research studies and journalistic expose's, there was no adequate implementation as a response compared to the magnitude of the problem.

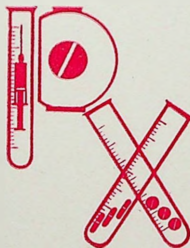
Interested members of the Gujarat Voluntary Health Association and the Medico Friend's Circle discussed the issue and finally sowed the first seeds of LOCOST in a nebulous form. In 1982, a team of experienced professionals in the field of community health got together and drew up a list of the essential drugs based on the Hathi Commission, the W.H.O. recommendations and other such documents. A search for competent and dedicated personnel finally led to a modest infrastructure for LOCOST.

LOCOST was registered as a public trust at Baroda in November 1983. The first supply of LOCOST drugs was despatched in October 1983. Subsequent visits to health institutions only underscored the need for rational therapeutics. LOCOST is now well on its way to establishing a small step, but in the right direction, in the field of social justice in health.

Why LOCOST ?

Several independent studies have revealed the following facts :

1. There are approximately 30,000 formulations going on in the market under various brand names. Most of these are unscientific.
2. All these formulations can be reduced to about 200 in number. Their compositions can be simplified thus enhancing the relevance for rational drug therapy.
3. Marketing them under generic names can further reduce their costs to the consumer.
4. Granting a reasonable profit margin, the present on going rate of profits can be lowered considerably.
5. It is possible to ensure a high quality of drugs at low costs.



It was widely believed that quality drugs cannot be made available at low costs. Yet there was a pressing need from health professionals working with the poor and marginalized sections of society for low cost quality medicines.

How LOCOST functions.

1. **Procurement :** LOCOST has contacted a number of reliable low cost drug manufacturers on the Bombay-Thane and Ahmedabad-Baroda-Surat regions whose integrity and credibility have not been doubted.

2. Some of these manufacturers supply the drugs specifically ordered by LOCOST.

3. **Quality testing and control:** LOCOST'S responsibility is to ensure a rigourous quality control of these drugs before despatch.

4 All the drugs distributed by LOCOST are under generic names and adhere to the principles of rational drug therapy as chartered by the World Health Organization, the Hathi commission and other authentic studies.

5. **Educational efforts :** LOCOST creates an awareness about the unethical and irrational practices of both the health professionals and the drug industry through visits, literature, seminars, etc. This enhances the scope for rational drug therapy.

90.25

The LOCOST Organization

LOCOST is governed and managed by

* A board of trustees
* An executive committee
* A member secretary
* A coordinator and his team
* An advisory board

— The Board of Trustees and Executive Committee frame policies and procedures, adopt methods and strategies to promote the objectives of LOCOST.

— The Member Secretary, who is a member of the Executive Committee, supervises and ensures that the LOCOST ideology and framework is implemented in the action wing.

— The Coordinator looks after the day to day administration, arranging the procurement, testing and despatch of quality drugs to the various Partners of LOCOST.

— The advisory board consists of persons Involved in developmental activities and concerned professionals. LOCOST submits its reports, accounts, budgets and future plans to the advisory board to ensure its social accountability.

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An invitation

These are, in short, some of our aims, objectives, methodologies and strategy to evolve and ensure a more "Just Order" in the field of Health in general, and Rational Therapeutics in particular.

If your Institution agrees with our basic orientation, philosophy and values, and would like to collaborate in our collective effort, please write to us at the address given below.

Postal address : The Coordinator
LOCOST
G P.O. Box No. 134
Vadodara 390 001

Office address : LOCOST
Arunodaya Building (top floor)
Opp. Lakdi Pool
Shivaji Road
Dandia Bazaar
Vadodara 390 001

Phone : 58481

Registered with the Assistant Charity Commissioner, Vadodara.
Registration No. E-3329/VADODARA

PERSONALITY

Crusader against drug-imperialism

DR. ZAFRULLAH Chowdhury, who won this year's Ramon Magsaysay award for community leadership, said he would continue his struggle against multi-national and other profit-mongering international drug companies, "who exploit the developing Third World countries like Bangladesh by pursuing their policy of medicine-imperialism".

Dr. Chowdhury, the 43-year energetic Bangladesh physician, who in 1972 founded the "Gano-Sasthya Kendra" (Peoples Health Centre), a medical service complex mainly for the rural poor, at Savar, some 35 km off the capital city, told this correspondent in an exclusive interview in Dhaka that he was "happy" with the news of the Magsaysay award.

"I am particularly happy that the cause for which we in Bangladesh are fighting has been recognised by the international forum. This is a recognition of our war against multi-national exploiters who trade on the ignorance of the millions of suffering humanity," Dr. Chowdhury said adding, "but we still have to go a long way to materialise our dream".

A freedom fighter in 1971's war of liberation, Dr. Zafrullah Chowdhury, who had become one of the most debatable men in Bangladesh not only for his role in the medical service but also in politics (although he is not a member of any political party) was given the prestigious Ramon Magsaysay award worth U.S.$20,000 and a gold medal in recognition for engineering Bangladesh's new policy on pharmaceutical drugs and making comprehensive medical care available to ordinary people.

Restless and mobile, Dr. Zafrullah Chowdhury, during his student life in the Sixties, was an activist against Field Marshal Ayub Khan's regime, and later known in the country as a man of "progressive political line". During the liberation war in 1971, he was in London doing FRCS degree but he left U.K. along with some of his friends to join the war.

A man of serious conviction and action, Dr. Chowdhury came to India in the midst of the war and started a field-hospital near the Indo-Bangladesh border to treat the wounded freedom fighters. After the independence of the country in December 1971, he shifted his small war-time hospital at Savar and began his work by constructing a small building after getting a donation of an acre of land from two local philanthrophists.

Within 13 years, the energetic Chowdhury spread his projects over 40 acres of land and his "Gano-Sasthya Trust" has been expanded to a great extent. At present, Dr. Chowdhury has 23 self-reliant units where over one thousand people work. He employs over 65 per cent women, mostly from the poorer sections of society, in his projects, including the "Gano-Sasthya Pharmaceuticals Ltd"—which has become one of the leading medicine producing industries in the country within few years. His philosophy to recruit a higher percentage of women in his projects was that the women, who constitute half of the country's population, are the most exploited and they should get proper support to stand on their own feet.

One of the specialities of Dr. Chowdhury's projects is that all these are designed and run on a self-reliant basis. The "Gano-Sasthya Trust", among others, has health magazine publications, printing, agriculture, confectionary, cloth, shoe and furniture producing units. The people who work are all treated equal. There is no bureaucratic structure. All workers, including Dr. Chowdhury, eat the same food and get the same standard of accommodation. "Gano-Sasthya Kendra" is a 'socialist' complex where Dr. Zafrullah Chowdhury is teaching his "self-designed socialism", in the very functioning of the complex.

There is another speciality of Dr. Chowdhury. In that the people who intend to

Dr. Zafrullah Chowdhury

work with "Gano-Sasthya Projects" should be non-smokers. All the workers must get up in the morning and work in the field for a specific time before going to their respective units. All the women workers in the project must know how to ride a bicycle. They must move from door to door in the villages to motivate people about the primary health care. In the initial days, Dr. Chowdhury's plan to send women into the villages on bicycles was vehemently opposed by many people. But now they have realised the usefulness of the women "Gano-Sasthya" workers, who educate the villagers not only in matters of health but also helps them to increase their farm output.

Dr. Chowdhury's "Gano Sasthya Pharmaceuticals", during the last two years, has been producing almost every essential drug and has become a competitor of the big multi-national companies. "I have been a target of the medicine-imperialist because I wanted to help my people by supplying them with cheaper and more useful medicine," he said.

In 1978's Presidential elections, Dr. Zafrullah Chowdhury played a pioneering role in nominating General Ataul Ghani Osmany, a retired General and the Commander-in-Chief of the Bangladesh liberation forces in 1971, as the principal candidate against the President, Lt. Gen. Ziaur Rahman. Although Dr. Chowdhury's nominee failed to win the electoral battle, he successfully projected his political views throughout the country. With this direct involvement in politics, Dr. Chowdhury, who until then was known mainly as a "Crusader" against the multi-nationals in the pharmaceutical sector, also became known in the political arena.

While explaining his past political role, the Magsaysay winner told this correspondent "... I was trying to establish a cause—a justice, that is, cheaper and easier health care to the poorest section of our society. Our poor and simple hearted people had been exploited by the multi-national giants for many years. I could not succeed earlier because there was no political support. Well, I am not at all out of politics as I believe that without political backing it would be very difficult to implement my ideas. So, I supported and worked for Gen. Ataul Ghani Osmany in the Presidential elections..."

The Magsaysay award winner, however, thanked President Lt. Gen. Hussain Mohammad Ershad for his government's "sincere will" to frame and implement the much debatable National Drug Policy. With the new drug policy the military regime of Gen. Ershad has drastically banned over 300 drug items overnight describing them as "useless and injurious to health".

Dr. Zafrullah Chowdhury, who was in the eight-member committee to frame the new drug policy said, "... We also tried persistently to frame and implement such a drug policy during the time of the former government, but failed. I must thank President Ershad for his sincere will in this regard and, of course, his government's courage to implement it despite repeated threats from very powerful external quarters". If I do not praise Ershad it would be a distortion of historical facts".

The debatable drug policy of Bangladesh which was approved by the Council of Advisors of Gen. Ershad on May 29, 1982 and acclaimed in many quarters was still under pressure. Dr. Zafrullah Chowdhury was not just a member of the committee, but played a vital role in its framing and implementation. He said that the new drug policy was not only an "achievement" of the present government but also "a step forward" in providing cheaper medical service to millions of people who suffer from malnutrition and die of simple diseases for want of medicine. "The medicine industry should not be compared with the industry which produces warheads. It should be a service-oriented industry and the companies which are involved should stop trading on human miseries," Dr. Chowdhury remarked.

Dr. Zafrullah Chowdhury married a German

and has a daughter. His wife, who is a Ph.D. and later became a doctor is now a partner of her adventurous husband in the "Gano-Sasthya Kendra". Chowdhury said that he did not consider the Magsaysay award as a personal reward.."It is a recognition of our joint venture which aimed at changing an age-old pattern in our society," he said. Dr. Chowdhury considers the people in the "Gano-Sasthya Trust" as his "partners in the challenging job". They (the workers of Gano-Sasthya Trust) have all the rights to decide whether I should take the award, or how to spend the money for our projects on receipt of the amount".

Although Dr. Zafrullah Chowdhury is known for his "crusade" against multi-national pharmaceutical companies, he is a target of severe attack from many quarters for his "secret understanding with some other multi-nationals". The critics used to say that Dr. Chowdhury was trying to drive out some multinationals" with the objective of establishing other multi-nationals business". When asked to comment on this point, he said, "This sort of attack surfaced only after the new drug policy was announced. Yes, I used to get donations from International voluntary organisations, but they give donations because of their progressive attitudes. They are not multi-national companies, they want to help us in our fight against the profit-mongers". In this context, he pointed out the names of NODIA of Netherlands and WAR ON WANT of London, who provide help for the Gano-Sasthya projects.

Dr. Chowdhury said that the Gano-Sasthya Trust is not a profit-earning organisation. The main objective of the trust is to ensure adequate medicare to rural people and with minimum cost.

Explaining how big multi-national companies were out to make profit, mostly by supplying useless medicines, he said that the Gano-Sasthya Pharmaceuticals which started production only recently has already become a profitable organisation despite the most minimum prices for the items. "Our medicines are produced according to the requirements of our people, and are 40 to 60 per cent cheaper than the items produced by the multi-national medicine companies," Dr. Chowdhury said.

Haroon Habib

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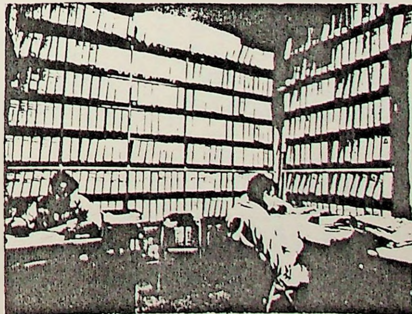

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B| JAISWAL, P. L. ed.
Hand book of animal husbandry.
(A useful book for students and extension workers, which contains authentic information on various aspects of animal husbandry. In the context of significant progress in research in all the fields of animal sciences, the present revised edition of the book has been equipped with additional chapters which did not find place in the earlier edition.)
ICAR, New Delhi.
788p

B| UPPAL, J. S. ed.
India's economic problems - an analytical approach.
(A collection of essays on Indian economy. Chapters in this revised editions have been re-written to take into consideration that during 1975-77 events in the Indian economy have changed very fast due to the imposition and removal of the Emergency Topics like Gandhian Economics and black money have been given their due importance.)
Tata Mcgrowhill Publishing Company, New Delhi.
409p

B| WHITTEMORE, CLAIRE.
Land for people : land tenure and the very poor.
(A report prepared by OXFAM which describes the prevailing land tenure systems in Africa, Asia and Latin America, in order to help the rural poor to build up an awareness of those parts of the system that take advantage of them. It also examines international policies and aid programmes to judge whether they are really helping the poorest of the poor or infact further impoverishing them.)
OXFAM, OXFORD, 1981.
55p

B| MEIER, GERALD M.
Leading issues in economic development.
(The book emphasizes stratcgic policy issues in accalerating the development of poor countries. The 'Leading Issues' in this new third edition of the book are the policies to eradicate poverty, reduce inequality and to deal with problems of unemployment.)
Oxford University Press, New York.
862p

B| THOMAS, HARFORD. ed.
(A) Picture of poverty : The 1979 Oxfam report.
(This book is an attempt to document what poverty actually means for the people who daily have to endure its curse. It is also an attempt to come to grips with some of its issues and concepts, to chart the progress, if any, that has been made to eliminate it, and to look at some of the ways poverty may be tackled.)
OXFAM, OXFORD, 1979.
117p £ 1.50

B| WEST BENGAL, GOVT.
Report of the officers' committee on land use in West Bengal.
(This first report on the land use in West Bengal seeks to present a survey on various problems associated with erosion and conservation hazards in North and South Bengal, highlights the critical issues which require urgent attention and suggests an operational programme with the necessary organisational set up.)
Department of Land Utilisation and Reforms and Land and Land Revenue, West Bengal.
22p + Annex I-V.

B| BHATTACHARYA, DEBESH.
(The) Role of technological progress in Indian Economic Development.
(The book presents the analysis and results of an empirical study of the role of technological progress in Indian economic development. It explains why growth has been faster in certain sector or group of Industries than in others of the Indian economy, since the inception of the national plans.)
The World Press Private Ltd., Calcutta, 1972.
276p Rs. 20.00

B| ARROW, KENNETH J.
Social choice and individual values.
(The book provides a basis for a critical evaluation of democratic theory in general as well as the theory of economic policy and welfare economices.)
Yale University Press, Haven and London.
124p

O| ANONYMOUS.
India : Sugar production.
Anonymous.

O| GUHA, RAMACHANDRA.
Forestry and Social protest in British kumauh, 1893-1921.
(This paper examines the trajectory of social protest in British Kumaun during the early decades of this century.)
Centre For Studies In Social Sciences, Calcutta, 1985.

EDUCATION

B| SENGUPTA, SUMIT ed.
Bayaska Shikkha O Gramonnayan.
(Discussion on different aspects of Adult Education as it is being pursued as an important issue by the West Bengal Govt., specially as the basis for rural development.)
West Bengal Comprehensive Area Development Corporation.
69p

O| LEGAL EDUCATION AND AID SOCIETY.
Constitutional dynamics of the reservation policy.
Legal Education And Aid Society, Madras, 1985.
16p

O| GUPTA, K. C.
Criminalisation of campus politics.
(It is description of what is happening on the campus of our Universities with increased frequency.)
ISI Documentation Centre, Bangalore. (Reprinted from The Radical Humanist. March '85.

ENVIRONMENT

B| CENTRE FOR ENVIRONMENT CONCERNS - HYDERABAD.
Hyderabad : The State of Art of Physical Environment, A Citizens' Report, 1985.
(A report on the present state of environment in Hyderabad city with all its ailments, like unplanned growth, lack of drainage, swarage and negotiable roads, and supply of scanty water which is not fit for human consumption. This effort of a handful of Hyderabad citizens is an effort aimed at stopping further decay of the city, and making a healthy Hyderabad. Each issue discussed has a social dimension too.)
CEC, Secunderabad.
73p

B| AGARWAL, ANIL AND NARAIN, SUNITA ed.
(The) State of India's Environment 1984-85. The second citizens' report.
(This report supplements the information provided in The State of India's Environment, 1982. It is not merely an update of the emerging environmental activities and concerns in India. It provides additional information on a number of subjects not dealt with last time. Thus the information on nomads and grazing lands, on the occupational health problems, on the distinct relationship between women and their environment and on significance of firewood consumption in cities and town with its impact on forests - have opened up unexplored vast areas of study.)
Centre For Science And Environment, New Delhi.
393p Rs. 320.00

HEALTH

B| REYES, DIWATA A. ed.
(The) Philippine health situation and the transnational drug companies.
(The book describes how in the context of a shocking picture or ill-health in the Philippines the transnational drug companies are remitting huge profits, and creating high cost of medical care and medicines.)
AKAP Research, Quezon city, 1982.
44p

POLITY

B| SNOW EDGAR.
Red star over China.
Penguin books.
621p

O| NAGARKAR, V. V.
Crime and politics in India.
ISI, Documentation Centre, Bangalore. (Reprinted from the radical humanist, March '85.)

O| SHAKIR, MOIN.
Lumpen elements in our politics.
(The author brings out how politicians find in some of our slums the material they need for their politics of intimidation.)
ISI, Documentation Centre, Bangalore. (Reprinted from The radical humanist, March '85.

O| KUMAR.
Towards alternative political models.
(This paper originally conceived of as a response to the debate on non-party political formations (NPPF); as a response to the papers on the same by Prakash Karat (CPI-M), Harsh Sethi (Lokayan) and Young India Project (YIP).)
Young India Project.

SOCIETY

B| SEN, AMARTYA.
Employment, Technology and Development.
(An informative book for practicing planners and students of development economics which focuses on the inter relationship between institutions, employment and technology, and the author investigates the institutional factors which affect policy - making.)
Clarendon Press, London.
193p

B| GRIFFIN, KEITH B. AND ENOS, JOHN L.
Planning development.
(The author is concerned with the practical problems if planning and economic policy in underdeveloped countries. A part is devoted to explaining the characteristics and uses of planning models and this serious limitations, specific policies in the four strategic sectors of Agriculture, Industry, Education and Population planning - and the problems of their implementation have been exemplified by the experience of five selected countries.)
Addison - Wesley Publishing, London.
262p £ 4.25.

B| LITTLE, I.M.D. AND MIRLEES, J.A.
Project appraisal and planning for developing countries.
(The chief purpose of the book is to provide detailed procedures - and short cults that can be used by those that develop projects or take decisions about them, - and to explain the economic arguments for these procedures.)
OXFAM, OXFORD, 1979.
117p £ 1.50

B| BHATNAGAR, S.
Rural local government in India.
(The book presents an integrated account of the highly diverse patterns of the Panchayeti Raj as these have been in force in various states of the Indian union. Attempt has been made to analyse the issues and problems emerging out of the functioning of the system, and to suggest remedial measures at relevant places.)
Light and Life, New Delhi.
278p Rs. 50.00

B| BETEILLE, ANDRE. ed.
Social inequality.
(The book offers a selection of contemporary writings on various aspects of social inequality. All the pieces were published after 1950.)
Penguin books, Harmonds Worth.
397p

O| MATHEW, BABU.
An introduction to the Indian Legal System.
(This booklet draws a brief outline of the background leading to the development of the Indian Legal System.)
Legal Education and Aid Society, Madras, August '1985.
10p

O| ALAM, JAVEED.
Class, Community and Nationality formation : A theoretical exploration through two case studies.
(In this paper the author is chiefly concerned with analysing some of the problematic theoretical aspects centred around the breakup and separation or crystallisation of people with similar national composition or make up.)
Centre For Studies In Social Sciences, Calcutta, July '1985.
68p

O| BHASIN, KAMALA.
Participatory self-evaluation, practical guide lines. part-I.
(This document bears a framework for participatory self-evaluation for Voluntary Agencies and Action Groups. The framework presents a broad spectrum of activities usually undertaken by Voluntary Agencies and Action Groups, and provides guide lines for their evaluation.)
ISI, Documentation Centre, Bangalore, 1985. (Reprinted from Ideas And Action 1985/1; 160, Kamala Bhasin.

O| BHASIN, KAMALA.
Some suggestions for conducting self-evaluation. Part - II. ISI, Documentation Centre, Bangalore. (Reprinted from : "Ideas And Action". Kamala Bhasin. "Are we on the right way", 1985/2 - 161.

O| BHATTACHARJEE, ABHIJIT.
Voluntary Agencies : Identity Crisis.
(This article traces the evolution of voluntary agencies as they encounter successive disappointment with various development programmes sponsored by Govt. and other authorities.)
ISI, Documentation Centre, Bangalore. (Reprinted from Mainstream, July 27th '1985.

WOMEN

B| MUKHOPADHYAY, MAITRAYEE.
Silver shackles - Women and Development in India.
(In the UN Decade for Women, the author, an Indian Sociologist has examined the deteriorating status of Women in India, how they remain shackled by increasing unemployment, lack of access to education and health care and the deficiencies of their legal status.)
OXFAM, OXFORD, 1984.
100p Rs. 45.00

O| VIMOCHANA.
Festivals of films on women.
Vimochana, Bangalore, 1984.

WORKER

B| PRIA.
Audyogic Swasthya Evang Suraksha. (Hindi).
(A study and description of the occupational diseases and the conditiona that create them for different types of workers. Necessary sefety measures have been pointed out.)
PRIA, New Delhi.
137p

B| PRIA.
Worker awareness and occupational health - study report submitted to ICSSR, New Delhi.
(The adverse effects of Industrialization, in the forms of occupational health hazards and sefety issues including environmental pollution have been studied, classified and discussed at length.)
PRIA, New Delhi, 1985.
97p

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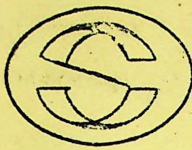
B| Books

O| Occasional Paper.

90' 30



AWARENESS LETTER

DEVELOPMENT RESEARCH COMMUNICATION AND SERVICES CENTRE
18 B, Gariahat Road (S), Calcutta-700 031
Month of DEC '85 and JAN '86

Dear friends, January, 1986.

Over the past two years we have been trying to develop the Awareness Service. And from this issue onwards we'll be giving you extracts of interesting articles from some of the journals we receive at the Centre ... that is in addition to the regular items. Our subject category is mentioned below. If you need photocopy of any of the documents listed please write to us. Copies can be made at 0.75 paise per page + postage. The documents marked * are available from us on cost + postage basis.

You'll be noticing that we're also starting a section on training workshop informations. If you organise any workshop please let us know the details beforehand so that we can inform our readers/members.

Special news section will highlight useful information from Service Centre and other organizations.

As you see our Awareness list is gradually turning into a bi-monthly newsletter. Any of your suggestions for making the service more relevant to your needs are most welcome.

Best wishes for a very happy '86.

SERVICE CENTRE

Our subject areas :

- Children (specially working children)
- Ethnic Minorities
- Other Minority Groups, Refugees, Migrants
- Women (specially working women)
- Workers (specially in informal sector)
- Communication
- Disarmament (including biological and nuclear warfare)
- Environment
- Appropriate & Alternative Technologies
- Economy (specially International Aid & Trade, Multinational)
- Polity (specially Human Rights & Civil Liberties)
- Society (specially people's organisations and grassroot groups)
- Education (specially non-formal and action-reflection oriented)
- Health (specially occupational and Community health)
- Documentation (Participatory Research & Training)

COMMUNITY HEALTH CELL
47/1, (First Floor) St. Marks Road
BANGALORE

CHILDREN

Occasional Papers :

VOLUNTARY HEALTH ASSOCIATION OF INDIA.
(i) Are hormonal pregnancy tests safe ?
(ii) The case against ep forte ?
(iii) Brief review of the present situation of the oestrogen - progestogen (Ep) drug campaign.
VHAI, New Delhi.

BANERJEE, RITA.
Life in Garbage.
Point counterpoint, 10th October, 1985.

COMMUNICATION

Occasional Papers :

WOMEN AND MEDIA GROUP.
Press and Social Movements.
Women and Media Group, Bombay, 1985.

Articles :

BENNETT, W. LANCE &GRESSETT, LYNNE. A &HALTOM, WILLIAM.
Repairing the News : A case study of the News Paradigm.
(A case study of how the news media "repaired" an ambiguous story that slipped through the journalistic gates reveals the boundaries of "what is news & what is not" and illustrates an underlying logic about how the world should be reported.)
PP 50 - 68,Journal of Communication, Vol. 35, No. 2.

Weaver, David. H & others.
Press Freedom, Media and Development.
1950 - 1979 : A study of 134 Nations.
PP 104 - 117, Journal of Communication, Vol. 35, No. 2.

STRODTHOFF, GLENN G & OTHERS.
Media Roles in a Social Movement : A Model of Ideology Diffusion.
PP 134 - 153, Journal of Communication, Vol. 35, No. 2.

ECONOMY

Books :

VILLEGAS, EDBERTO M.
Studies in Philippine political economy.
(In this book the author has dealt with five of the most critical areas of Philippine Society : labour, oil, foreign investments, World Bank and IMF control, and the so-called reforms of the Society. His meticulous research and close reasoning lead to the conclusion that Philipino consumers and workers are being exploited and abused for the benefit of foreign interests and their partners.)
Silengan publishers, Manila.
226p

Occasional Papers :

ANONYMOUS.
Negros Sugar Industry situationer.
(The Sugar industry in Negros was started during the Spanish colonial period. Today, the biggest sugar corporation have American equity and investment. This paper deals with the present situation in the sugar industry of Negros.)
Anonymous.

OMVEDT GAIL AND OTHERS.
Women's Liberation Movement - A collection of documents.
Information Centre, SMD, Pune.

KAUR, JIWAN JOT.
Women's Movement.
Shackles And Women, Punjab.

SACHETANA.
Women's Organisations.
Sachetana, 1985. (The National Women's Conference, Bombay).

NARI NIRJATAN PRATIRODH MANCHA.
Women's Organisations.
Nari Nirjatan Pratirodh Mancha, Calcutta. (The N.W.C., B'bay).

RAPP, RAYNA.
Women, Religion And Archaic Civilizations : An Introduction.
Feminist Studies, Vol. 4, No. 3, October, 1978.

Articles :

MACEDA - VILLANUEVA, MARION.
Women And Water.
Balai, Asian Journal, No. 10, 1984, PP 21 - 23.

WORKER

Books :

WEST BENGAL. LABOUR DEPARTMENT.
(The) Calcutta Gazette, Extra - ordinary. December 8th, 1982.
(Elaborate Notification of the rules made by the Governor in exercise of the power conferred by Section 35 of the Inter state Migrant Workmen Act, 1979. Published after previous publication as required by Sub-section(1) of the mentioned Section[35].)
Govt. Printing, West Bengal, Calcutta.
31p

Articles :

ASIANS ALL OVER THE WORLD.
(A collection of articles look into the Asian immigrant experience that spans across continents and cross cultures.)
Balai, Asian Journal, No. 12, PP 14-24.

EVANGELISTA, SUSAN.
The Pinay As Migrant : Filipina Immigration To The United States In The 1930S.
Balai, Asian Journal, No. 12, PP 6 - 9.

PEOPLE'S RIGHTS : SOME ASIAN CASES.
(Priority targets for investigation are economic and political rights of the majority sectors of Asians Society : peasants and workers.)
Balai, Asian Journal, No. 9, 1984, PP 8 - 10.

YOSHIO, YOKOYAMA.
The Japanese Labour Movement - Gasping for Refreshment.
AMPO, Japan - Asia Quarterly Review, Vol. 17, No. 2, 1985.
PP 36 - 48.

Centres' Photo Feature Service :

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Photo Feature Service,
SERVICE CENTRE,
18B Gariahat Road(S),
Calcutta 700 031.

Poster Design :

We've started designing posters for various organizations. If interested please contact us.

News of N F S - INDIA :

NFS - News from Fields and Slums. This news feature service was started by Bharat Dogra in November 1985. Bharat Dogra himself hardly needs any introduction with over 800 articles to his credit on development and human rights issues.

This monthly package of ten articles, about 50 cyclostyled pages, is based on field-reports, perspective articles and news. It is available in both Hindi and English. "It is a service for supplying articles and news relating to the impact of development processes on the poor and oppressed people in India."

We have received two packages so far and find the material useful and informative. We will be making summaries/extracts from these articles and carry them in our quarterly journal DEBACLE.

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c) A concessional rate of Rs. 150/- is available for voluantary agencies, educational & research institutes, libraries, training centres, trade unions, private individuals, and

FERNANDES, WALTER.
Social Activists And People's Movements.
(The role of social activists or Action Groups have been discussed in this book, as part of the topics of people's movements, social change and political alliances.)
Indian Social Institute, New Delhi.
186p Rs. 30.00

ICSSR.
Sociology And Social Anthropology. ICSSR Journal of Abstracts And Reviews. Volume 14, No. 1, January - June, 1985.
(The present issue of the journal has been based on a revised classification of themes of Sociology and Social Anthropology in India, so that it may be representative of the major trends and concerns in these fields.)
ICSSR, New Delhi.
188p

Occasional Papers :

KARGUPPIKAR, LEELAVATI.
Resolution On Personal Law.
Mahila Anyay Nivarana Samiti, Belgaum, 1985.

CACP.
The Citizen's Alliance For Consumer Protection. An Over view.
(The formation of CACP in March, 1979 was an attempt to answer the need of the time : a militant, united and people - oriented movement responsive to the interests of the majority of Filipino consumers.)
CACP.

Articles :

KOHEI HANASAKI.
Grass-roots Movements In The Japanese Archipelago : Ideas And Experiences.
AMPO, Japan - Asia Quarterly Review, Vol. 17, No. 1, 1985, PP 34 - 41.

LABRADOR, VIRGILIO S.
Over population Or Surplus Labour ?
The part played by labour in the population question.
Balai, Asian Journal, No. 11, PP 7 - 11.

PAEK-SAN, CHANG.
The Phoenix Of 1984 : A Vibrant Democratic Mass Movement Erupts In South Korea.
AMPO, Japan - Asia Quarterly Review, Vol. 17, No. 1, 1985, PP 2 - 25.

TOLEDO, RAYMOND LIM.
Population In The Asian Scene : Hard Questions With No Fast Answers.
(What are the theories about population control and national development ? How do they apply to Asia ? The two questions have answers with shades of life and death for millions of poverty striken Asians ....).
Balai, Asian Journal, No. 11, PP 2 - 6.

YU, MIZUSHIMA.
A Close Encounter With The Korean Democratic Movement.
AMPO, Japan - Asia Quarterly Review, Vol. 17, No. 1, 1985, PP 26 - 33.

WOMEN

Books :

SHARMA, KUMUD AND OTHERS.
Women In Focus. A community in search of equal roles.
(The book is based on data collected from two small districts of Uttar Pradesh, and unfolds the broader aspects of sex role differentiation in Indian Society. For Development planning, it provides grounds for questioning the attitudes and perceptions of bureaucrats, professionals and others who formulate policies and programmes.)
Sangam Books, Hyderabad.
117p

Occasional Papers :

WOMEN'S CENTRE.
Building Alternate Support Structures For Women - A process of personal growth and consciousness raising.
(In this paper, whether and to what extent individual help' is consciousness raising activity, is being examined.)
Women's Centre, Bombay, 1985.(The N. W. C., Bombay).

STREE JAGRUTI SAMITI.
Perspectives And Tasks For The Women's Movement in India.
Stree Jagruti Samiti, Bombay, 1985.(The N.W.C., Bombay).

GABRIEL, ANDREA.
Participation of Latin American Women in Social & Political Organisation : Reflections of Salvadoran Women.
Monthly Review, No. Vol - 34, June 1982.

STRI KRITI SAMITI.
Participation Of Women's Organisations In Mass And Other Organisations.
Stri Kriti Samiti, Bombay, 1985.

FORUM AGAINST OPPRESSION OF WOMEN. (The N. W. C., Bombay)
Perspective For Women's Liberation Movement In India.
(This paper aims to discuss some of the very important problems that the Forum against Oppression of Women have faced in the course of its existence for nearly 6 years, between January 1980 to December 1985.)
FAOW, Bombay.

SAHELI.
Relationship Between Consciousness Raising And Helping Individual Women.
Saheli, New Delhi, 1985.

SAHELI.
Religion And Women.
Saheli, Delhi.

NARI SAMTA MANCH, BOMBAY 1985.
The Role Of Autonomous Women's Organisations.
Nari Samta Manch, 1985.

DUTTA GUPTA, ISHANI AND SEN,SIMONTI.
The Women's Question.
Nari Nirjatan Pratirodh Mancha, Calcutta, 1985.

PRAKASH, PADMA.
Women, Health And Environment.
(This paper is a collection of ideas and information put together with the intention of arriving at a focus for discussion of health and environment issues in the Women's Movement.)
Forum Against Oppression of Women, Bombay, 1985.
(The National Women's Conference, Bombay).

OMVEDT GAIL AND OTHERS.
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Information Centre, SMD, Pune.

KAUR, JIWAN JOT.
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PEOPLE'S RIGHTS : SOME ASIAN CASES.
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newspaper & magazines not wanting publication rights.

d) Send your cheques or information queries to :

BHARAT DOGRA,
D-7 RAKSHA KUNJ,
PASCHIM VIHAR,
NEW DELHI - 110 063.

Centre's Training Activities:

Over the past two years we have been engaged in training activities. We have been concentrating on imparting skills to development workers, organizers & social activists in the field of communications, documentations & non-formal education.

Most of these workshops were conducted for village level activists in M.P., Bihar & West Bengal. So far we find that our followup systems need to be fightened some what and we are working at that.

In future issues of our Awareness List we will be giving you more details of our experiences in this field. And in the meanwhile we invite any kind of feed back, ideas & programmes from those of you who are interested or involved with work in this field.

Please, write to our training co-ordinator Tapas Naskar at the Centre's address.

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90.31

LIST OF BOOKS/OCCUPATIONAL PAPER ON DRUG.

1. BHAGAT, MUKARRAM.
   Aspects of the Drug Industry in India.
   Centre for Education and Documentation, Bombay - 39.
   1982, Rs. 15.00, pp 119.

2. BAM INTERNATIONAL,
   Medicines and Third World, A great invasion.
   BAM International.
   Rs. 15.00 p. 40

3. WAR ON WANT.
   A dangerous prescription.
   War On Want (The Health Unit), London, U.K. 1984.

4. INTERNATIONAL TRADE.
   BAM International .
   BAM International, Manila, Philippines, 1984.

5. DRUGS.
   Insaan Ke Liye Dawa Ye Dawa Ke Liye Insaan.
   Drug Action Forum. p.40

6. CERC.
   Beware of Hazasdous Drugs and Pesticides.
   CERC, Allahabad, March'81. p.10

7. CHAUDHURI SUDIP.
   The Foreign Controlled Firms in the Production of Bulk Drugs in India.

8. WORLD HEALTH ORGANIZATION.
   (The) use of essential drugs : Report of a who expert committee.
   WHO, Geneva, 1983.
   Rs. 10/(N) p.46

9. DEPARTMENT OF HEALTH, MINISTRY OF HEALTH & FAMILY PLANNING.
   The Ayurvedic Formulary of India, Part- I.
   Govt. of India, 1978.
   Rs. 11.55 pp324

10. CHOWDHRY, Z & S.
    Essential drugs for the poor : Myth and Reality in Bangladesh. (1980-1982).
    Gonoshasthya Kendra, Dacca. p.58

11. MAHFUZULLAH AND FAROOQUE, A.B.M.
    Jatiya Oshudh Niti.
    Shabar Janya Shwasthya, Dhaka. p.23

12. ISLAM, NURUL AND OTHERS ed.
    Nishiddha Oshudher Abhidhan.
    Shabar Janya Shwasthya, Dhaka.
    TK : 5.00 p.50

13. REYES, DIWATA A. ed.
    (The) Philippine Health Situation and The Transnational Drug Companies.
    Original entry under public health.
    REY/15.04.01.

14. WORLD HEALTH ORGANIZATION.
    Prayojoniyo Oshudh; Report of a who expert committee.
    Gana Prakashani, Dhaka.
    TAK. 12.00 p.101

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APPROPRIATE TECHNOLOGY

B| FOLEY, GERALD AND MOSS, PATRICIA.
Improved cooking stoves in developing countries.(Technical Report no. 2, Earthscan Energy Information Programme)
(This Report gives a detailed appraisal of the role of improved cooking stoves in the wood-scarce areas of the developing world. Reliable and practically oriented information is presented, intended both for policy makers and the scientific and technical community.)
International Institute for Environment and Development, London.
177p

B| FOLEY, GERALD AND OTHERS.
Gasifiers: Fuel for siege economics.
(A study of the different aspects of gasification, by which alternative energy called "producer gases", derived from biomass are being used in place of gasoline or diesel to drive standard engines of vehicles, irrigation pumps and other machinery in many countries of the world today.)
International Institute for Environment and Development, London, 1983.
58p

B| MCAUSLAN, PATRICK.
Urban land and shelter for the poor.
(The author has focused on the plight of hundreds of millions of people in the third world without any real homes, - while 1987, has been declared by UN as the international year of Shelter for the Homeless.)
International Institute for Environment and Development, London, 1985.
140p

CHILDREN

B| INDIA. MINISTRY OF LABOUR.
Report of the committee on child labour.
(Report of the sixteen-members committee apointed by the Ministry of Labour, Govt. of India in 1979, - to examine the state of wide-spread existence of child-labour in the country and the problems arising out of that situation. The report measures the dimensions of working children in the light of the lagislative frame work in India for the issue and suggests welfare measures which include health, nutrition, minimum wage and other points.)
Govt. of India, 1979.
106p Rs. 10.00

O| THE CONCERNED FOR WORKING CHILDREN.
The Child Labour: Employment, Regulation, Training and Development Bill 1985.
(Draft of a Bill, presented by CFWC for consideration by legislators, which seeks to recognise the rights of a child worker and gives him some protection and oppertunity for growth.)
CFWC, Bangalore, 1985.
34p

O| VHAI (Sathyamala C.etal)
The under five booklet.
(The Booklet explains the need for and procedure of maintaining growth-charts to monitor the health of children in 0-5 age group.)
VHAI, DELHI.

COMMUNICATION

O| COUSINS, WILLIAM J. (Tr. Utpal Basu).
"Alochana - sabha". (Bengali)
(The publication deals with different aspects of Group-discussions and small meetings as a communication medium).
CHITRABANI, Calcutta '85.

DOCUMENTATION

B| SSDC, ICSSR.
Library and information science literature - SSDC resource list.
(The Social Science Documentation Centre under the Indian Council of Social Science Research, has presented in this volume a list of its holdings on library and Information Science consisting of books, theses, periodicals and standards, intending it to be a forerunner of a union catalogue.)
ICSSR, New Delhi.
182p

ENVIRONMENT

B| TIMBERLAKE, LLOYD.
Africa in crisis - the causes, the cures of Environmental Bankruptcy.
(In the context of famines and hunger which have swept across Africa, this important new book argues that famines are the direct results of unsound economic, agricultural and environmental strategies. The natural resources of Africa, the forests, soils and rivers have been exploited byrthe poor desperate peasants in a way which is bankrupting African Environment. This bankruptcy has been responsible for many social evils and political issues.)
International Institute for Environment and Development, London.
232p

B| SAHABAT ALAM MALAYSIA (SAM).
Environment, development and natural resources crisis in Asia and the pacific (Proceedings: symposium: SAM, - 22 - 25 Oct, 1983.)
(The volume contains papers submitted for seminar organised by Sahabat Alam at Penang from 22 - 25 Oct, 1983. The papers are grouped into sections covering an overview of the situation, forestry, wild life, mineral and non-mineral resources, food and agriculture, human settlements, the working environment and toxic wastes and NGOS.)
SAM PENANG, 1984.
422p Rs. 85.00

B| GHOSH, R. C. and others.
Environmental effects of forests in India, Indian Forest Bulletin - 275.
(The paper reviews the present status of research on environmental effects of forests in India. The subject matter has been divided into the broad fields of Forests and Climate, Forests and Water and Forests and Soil.)
Controller of publications, Delhi, 1982.
20p Rs. 3.10

B| BULL, DAVID.
(A) Growing problem - Pesticides and The Third World.
(The book investigates the alarming facts about pesticides from the perspective of the poor, - that they threaten the health and livelihood of the rural people, though they bring a promise of higher yields and more food for the hungry. It suggests how to make the most of pesticides while minimising their dangers, and concludes with a series of practical proposals for action by governments, industry and international organisations.)
OXFAM, OXFORD, 1982.
192p

B| AGARWAL, ANIL AND OTHERS.
* No place to run. Local realities and global issues of the Bhopal disaster.
(This report is a joint product of three organisations, The Highlander Research and Education Centre, PRIA and CSE. It describes the events at Bhopal, exposes the record of Union Carbide world wide, and analyzes issues that emerge from this disaster.)
Highlander Centre and SOPRIA., 1985.
40p Rs. 15.00

B| SAHABAT,ALAM., MALAYSIA.
Papan radioactive waste dump controversy.
(The book is an indepth report of the events that led to the controversy over the siting of a dumpsite in Papan to store radioactive materials. It is the story of a people fighting for their rights to good health, to a safe environment, and to decide on matters affecting their future.)

B| SAHABAT, ALAM., MALAYSIA.
Pesticide dilemma in the Third World - a case study of Malaysia.
(A study of the ecological and health hazards of indiscriminate pesticide application in agriculture, the book also exposes the inadequate policies pursued by the authorities in this respect. SAM has taken a bold attempt to marshall public opinions on the subject, so that the public's interests cannbe made to outweigh those of manufacturers, agency houses and politicians that often work hand in glove with business, to the detriment of common good.)
Sahabat Alam., Malaysia, Penang. 1984.
77p

B| CHATTOPADHYAY, K.
(A) Preliminary report of a pilot enquiry on the socal ecology of Sunderban.
(A work of Social Ecology which informs about the environment of Sundarban area, about the social groups and the exploitation or utilisation of the environment by them.)
Indian Statistical Institute, Calcutta, 1983.
29p + Tables.

B| SAHABAT, ALAM., MALAYSIA.
(The) State of Malaysian Environment 1983 - 84 : Towards greater environmental awareness.
(The report reveals environmental problems of Malaysia, for example the discharge of toxic waste into the environment, effects of misuse of pesticides, the reduction of potential for productive forestry and wild life, depletion of fishing resources and urban environmental impacts like acid rain, haze occupational health etc.)
SAM, PENANG, 1983.
95p Rs. 23.00

O| ISI, BANGALORE (Seminar).
Conquering space ?
(The article highlights socio-economic & cultural dimensions of our conquest of space.)
ISI, B'lore - Reprinted from seminar, June '1985.

O| EARTHSCAN (Hobson, Sarah).
Dam the river, Damn the peasant.
(The article highlights the low cost effectiveness and negative social impacts of large scale dams, taking the case of two large dams scheduled to be completed by 1988 in Senegal, Africa.)
Earthscan Feature, London, 1985.
2 + 1p

ETHNIC MINORITIES, MARGINAL GROUPS.

O| PRATAP ANITA (Sunday).
Tamil Militants Unite.
(Unity among 'Eelam' groups and it's implications are the subject for this article.)
ISI, Bangalore. Reprinted from SUNDAY, 28th Apr. - 4th May pp 46-49.
7p.

O| SAMPRADAYIKTA, VIRODHI ARDOLAN.
VIKALP (Vol. 1, No. 1).
(The publication analytically examines communal violence and it's impact on society.)
Bulletin of Sampradayikta Virodhi Andolan, Jan -Mar. 1985.
44p Rs. 3.00

HEALTH

B| CHAUHAN, SUMI KRISHNA & GOPALAKRISHNAN, K.
(A) Million villages, a million decades, - The world water and sanitation decade - from two South Indian Villages.
(While weeare passing through UN's International Drinking Water Supply and Sanitation Decade (1981-90), this book looks at the roots of the Decade in rural India, concentrating on two South Indian Villages and studying how water, sanitation and health issues affect women, men and children in the villages.)
International Institute for Environment and Development.
58p.

B| AGARWAL, ANIL AND OTHERS.
Water, Sanitation, Health - for all, prospects for the International Drinking Water Supply and Sanitation Decade 1981-90.
(In view of the UN's launching of the International Drinking Water Supply and Sanitation Decade in 1980, this book examines the Decade's aims, describes the position globally, and in Kenya, Columbia and India.)
International Institute for Environment and Development, London., 1983.
143p

O| DRUG ACTION FORUM, W.B.
"Insaan ke liye dawa ya dawa ke liye insaan". (Hindi)
(A booklet underlining problems related to drugs and their implication on people's health. It talks about shortage of essential drugs, profiteering by drug companies and dangerous drugs, among other things.)
Sarvangeen Gram Vikas Kendra, Bihar & DAF, W.B., April '85. (trans : M.K.Kedia)
42p Rs. 3.00

O| D'SOUZA A.L.
Guinea worm prevention - Major target of WaterdDecade.
(The article explains the infection cycle of guniea worm & its extent in India...explains its impacts on health & measures for prevention.)
UNDP, Delhi, 1985.
7 P.

ECONOMY

B| GHOSH S.N.
Census of India 1981.Series 23.West Bengal.Paper 1 of 1982.Final population totals.
(Contains final population totals of Sbheduled caste population and scheduled tribe population.)
Govt.of West Bengal, Calcutta.
123 p Rs. 10.40.

B/ ECKHOLM, ERIK AND OTHERS
Fuel wood : The energy cirsis that won't go away.
(The author, has drown surprising new conclusions about fire wood, loss of seil, population pressure and poverty.The third world poor need for more fuel than village woodlets can ever provide.It has been pointed out that much more must be done to plant trees on farmers and to promote energy alternatives.)
International Institute For Environment and Development.
London.
107 p.

B| HTUNG, NAY AND HUISMANS, JAN W ed.
Industrial hazardous waste management.Industry and Environment, Special issue, Nov.1983.
(The articles narrate how the problems posed by production transportation, stroge and disposal of the hazardous wastes of various industries are being handled by different countries of the world.Aspects of identification of such wastes and ignorance as to the exact location of old hazardous waste dumps have been discussed.)
United Nations Industry and Environment Office.
U.S.
79 P.

B| PRIA
Occupational Helth and safety- a manual for activists.
(Provides detailed and minute information regarding the gretest evil of industrialization in India,- Which is called occupational health hazard.Different types of diseases that the workers suffer from have been described. Nature of accidents have been discussed.)
PRIA
New Delhi
91 p.

B| *MOLLISON, BILL AND HOLMGREN, DAVID.
(The book synthesizes knowledge about a multitude of econemically useful plants and animals, with land use ideas from a multitude of desciplines : Ecological Theory, Econamic Botaney, Anthropology, Horticulture, Landscape Architecture and Hydrology.
International Tree Corp Institute.
U.S.A.
123 p.

B * Perma-Culture one.A perennial Agriculture for human Settlements.

B/ MOLLISON,BILL.
Perma culture two.Practical design for town and country in parmanent agriculture.
(The book attempts to make practical suggestions as to how the best of benefits may be obtained from permanent agriculture centred on human settlements and community, by evolving new approaches and solutions for different climates and occasious so that minimal energy is needed and more calories may be produced.)
Tagari
Australia
1979.
144 p.

B| DOGRA,BHARAT.
* Poverty development and poverty:
India 1947-84.
(An assessment of the oversale perfermance of post-Independence India in fightings hunger and thirst,in the utilisation of natural resources,in attempts to introduce land reformes and modern agriculture technology etc,which in totality present a dismal picture only to expose a persistence of wide spread poverty inherited from colonial rule in 1947.These are detailed chapters on the role of foreign aid and struggles of the poor for a Better life.)
Bharat Dogra.
New Delhi.
327 p Rs. 45.00.

B| SAHABAT ALAM MALAYSIA.
Seeds and food security: a seeds study report.
(A report on one aspect of the green revolution or the process of scientific and technological development in the third world's agriculture.The report sounds an alarm bell on the situation by analizing the profile of the seed industry and documenting how the local farmers of Malaysia are responding to high yielding varieties and their problems).
Sam
Penang
85 p Rs. 18.00.

D| HEGDE VIJAY N.
'C' & 'D' lands as a resource to rural life - A case study + survey of C & D lands in sagar,Shimoga,Chikkmagalur & Koppa forest divisions.
(Whats relationship of people to 'C' & 'D' classes of land (unsuitable for agriculture- public land) in selected districts of karnataka and how its being jeppardised by present Govt.policy of alloting such lands to private companies is the subject of these articles.)
Arogya Vikasa Prakalpa,
Shimoga
5 + Vii p.

HUMAN RIGHTS

B| MASUD,SYED S.A.
Report of the sub commission on prevention of discrimination and protection of minorities.
(Report of sub commission under the commission on human rights on its thirty sixth session held in geneva between 15 August and 9 September ,1983.)
United Nations
Economic and Social Council,
Geneva.
1983.
P : Vii,III + Annex.

B| COBO,J,R,MARTINEZ
Study of the problem of discrimination against indigenous populations.-Final report on thirty sixth session:- commission on human rights.
(Last part of the final report,submitted by special reporteur,of the sub commission on prevention of discrimination and protection of minorities.Item 11 of the provisional agenda)
Economic and social council,U.N.Geneva.
106 p.

B| UNNAYAN
The 1985 supreme courts view of the eviction rights of pavement and 'slum'-dwellers
(The document is a collation of extracts from judgement delivered by supreme court on 100785 on the 1981 writ petition by olga telh's and others and by the PUCL-CPDR and others regarding the summary evictions of pavements and slum dwellers of Bombay.)
Unnayan,Calcutta,July '85 (extract from supreme court judgement on july 10'85)
18 p.

B| TARKUNDE,V.M.
The terrorist and disruptive activities (prevention) act 1985.
(An article highlighting the dangerous elements of this new act and calling all people to support the demand of it's withdrawal/cancellation.)
ISI B'Lore.Reprinted from radical humanist june '85.

B| CHACKO,FR P.A.
The BANJHI massacre some searching questions + supplement.
(Det[illegible] Banjhi village,[illegible]s of dist[illegible]bihar on april 1985 in ex janata party MP artony .The articale highlights the background of the incident and examines it's implications.

POLITY

B/ ISI (Radical Humanist)
Role of black money in party politics.
(The article exposes the role of black money in Indian politics.)
ISI B'lore reprinted from raddical humanist jan '85
PP 6-9
3.p.

SOCIETY

B| DESROCHERS,JOHN
Classes in India today.
(The booklet looks at social stretification from the class view point.A painful contrast is exposed,through idtentification of the various socio-economic and political groups, between our country's noble ideals and its social realities.
Centre for social action,Bangalore.
125 p. Rs. 4.00.

OB PREMI,MAHENDRA K. AND TOM,JUDY,ANN L.
City typology,Migration and Development in India
(Describes the pattern of migration to cities in India, as also the characteristics of migrants and the determinants of Migration flow.The Govt.of India's urban development policies have been examined.

East West Population Institute,Honolulu,1983.
153 p.

ICSSR.

Sociology and social anthropology ICSSR journal of abstracts and reviews.Vol.13.no.2.July-December.1984.
(A collection of scholarly reviews and valuable abstracts,of publication on the varied fields of human society,including culture,environment,politics religion and ethnology.Index has been provided for the names of the authors of articles abstracted,as also for authors of the books reviewed.)
ICSSR,New Delhi.
377.p. Rs. 10.00.

BHAIA,ABHA AND BHASIN,KAMALA ed.
Vikas Ke Ayam ; Kuchh Samasyaen,Kuchh Samadhan.
(Intended for development activists who will find this book to be a guide in the various fields of development, that provides analysis of facts,project reports and case studies on adult education,ethnic movements,rural sociology and other important issues.)
Fao,New Delhi,1984.
195 p.

UNNAYAN (MONTHLY REVIEW).
The public experience of planning for the unorganised [illegible]
(This set of documents exposes the various dimensions of public policy while dealing with urban-informal sector (Hawkers,Rickshawpullers,slum dwellers) through reproduction of news items,extracts from policy meetings etc.
Contex : July '85 supreme court ruling on encroachments.)
Unnayan,Calcutta,July'85.(BTV bulletin spl.no.250785.

ISI B'LORE (MONTHLY REVIEW)
Basic christian communities and the future of Latin America.
(The article explores the interrelation between religion and radical politics/ideas and movements.)
ISI B'LORE (Reprinted from monthly review,July-Augst'84.

ISI/MAINSTREAM.
Rajiv Gandhi's policy projection (an interview)
(Prime Minister's thoughts on policy issues and national priorities as revealed through interview to Financial Times (London) on April 4'85.)
ISI B'LORE (Rep ; from Mainstrem april'85 pp 60-62 originally published in Financial Times (London)

WOMEN

BHAIA,ABHA AND BHASIN,KAMLA.
Mahila vikas ke ayam. (Hindi)
(Study and discussious on women's position in society which is generally male-dominated.Women's problems, sufferings as well as solutions and improvements of situations have been dealt with at length.)
Fao,New Delhi,
122 p.

MITRA,MANOSHI.
Mata aur go mata; The woman and the sacred cow- A study of women in dairy production.
(The data generated by survey has been analysed in order to answer the basic question of different patterns of involvement of women in dairying,- constraints,labour imputs,gains,participation and the intervention to intensify this.Chief areas taken into account are,Nalgonda, chittoor and Krishna districts of the south.)

B| CENTRE FOR WOMEN'S DEVELOPMENT STUDIES.
Tables on women's co operatives in India.
(A set of tables prepared from the particulars received from the registrars of copperative societies,and from the individual women's coperatives in the country.A date base to be used by planners,administratoess,researchers and others.
CWDS.New Delhi,1983.
127 p.

B| BHASIN,KAMLA.
Towards empowerment.
(Report of a south Asian reagional Training workshop organized by FFHC/AD at the end of 1983,for women development workers from Bangladesh,India,Nepal,Pakistan, and Srilanka.)
FAO,New Delhi,
237 p.

B| ACHARYA,SARATHI.
Women and rural development in the third world.
(A study and analysis in the perspective of the third world of women's participation in agriculture,nature of their work, and of women's role in rural economey together with reccommendations on policies.)
Tata Institute Of Social sciences,Bombay.
146 ; p.

B| MINISTRY OF RURAL DEVELOPMENT GOVERNMENT OF INDIA.
Development of women and children in rural areas(DWCRA)
(The booklet describes the different aspects of DWCRA scheme of the central govt.Which aims at enabling women to make greater use of services offered by IRDP,since presently only 10% of IRDP benificiaries are women.)
MRD,Govt.of India and UNICEF (text by Pria),Delhi,1985.

B| PRIA (TANDON RAJESH et al.)
How to communicate effectivelyy with grass-roots women ?
(Didactic Bulletin No2in the serves:Women's participation in development deals with ideas about and methods of commonication in the context of women's organisations.
PRIA + UNICEF New Delhi,1985.

B| PRIA (TANDON RAJESH ET AL)
How to conduct participatory research among women?
(Didactic bulletin no 1 in the servies women's participation in development- explains the basic principles of participatory research and it's role in the context of organising women.)
PRIA + UNICEF,Delhi,1985.
28 p.

B| PRIA AND UNICEF (Khot,seemantini et al)
How to organise women's groups.
(Didactic bulletin no 3 in the servies: Women's participation in development dealing with problems and possibities forming women's group.)
Pria & Unicef,Delhi,
28 p.

B| PRIA
Invisible hands : Towards empowerment.
(The reports narrates the proceedings of a national workshop held in Udaipur Mar 25-29 '85 and it's major conclusions regarding income generating projects as a means of organising women.
Pria,Delhi,1985 (Report of national workshop on women's income generating activities,UDAIPUR,Mar 25-29,85.)
31 p.

B| - Books, O| - Occasional Paper.

Part III - Preparations of commenly used Haematinics

Dr. Rajul Desai M.D(Pharamacology)
Dr. Sagun Desai M.D(Pharmacology)

Sr. No.	Compound (Name)	Formulation	Ingrediants and their quantity		Company	Cost Rs.	Dose
1.	Aktivakid	§Syrap (Each 5 Ml. contains...	Liver fraction Ferric glycerophosph Yeast Extract Lysine mono - HCl Vit B-12	125 mg 60 mg 15 mg 25 mg 1.0 mgg	German Remedies	10.12/ 100 Ml.	5-15 ml.thrice daily before or after meals
2.	Anemadox	Capsules (Each cap. contains..	Ferrous Fumerate Folic Acid Vit B-12 Cal.Carbonate Vit-D Vit-C	360 mg 1.5 mg 15 Mcg 200 mg 400 IU 75 mg	Merck	11.31/ 28 Cap.	1 Cap. daily
3.	Dumasules	Capsules (Each Cap. contains..	Ferrous Fumerate Vit-B-1 Vit-B-6 Niacinamide Folic acid Vit B12 Vit-C	300 mg 5 mg 1.5 mg 50 mg 0.75mg 7.5 mcg 75 mg	Pfizer	R29.52/ 100	2 Cap.daily, 1 each after breakfast and dinner.
4.	Nori-A	Tablets (Each tab. contains..	Ferrous Fumerate	200.00 mg	Wellcome	18.69/ 500	Adults & Children Over 12 yrs.: 1 Tab. thrice daily and children 6-12 yrs. ½ tab.thrice daily after food

Liver

...2.

Sr. No.	Compound (Name)	Formulation	Ingrediants and their quantity		Company	Cost Rs.	Dose
5.	Eisocal	Tablets (Each tab. contains..	Iron Calc. Complex Vit-A Vit-D-2 Vit B-1 Vit-B-2 Vit B6 Vit B12 Vit-C Niacinamide Folic acid Copper Citrate Molybdenum trioxide Mang.citrate	350 mg 1000 IU 200 IU 1 mg 0.5 mg 0.5 mg 1 mcg 25 mg 7.5 mg 0.5 mg 0.1 mg 0.05 mg 0.05 mg	Cipla	6.47 / 30	1 to 2 tab.thrice daily preferably after meals
6.	Fefol Spansules	Gel.Capsules (Each cap. contains..	Dried Ferrous Sulphate Folic acid	150 mg 0.5 mg	Eskay Lab.	8.47 / 15	1 Cap. daily throughout pregnancy & lactation
7.	Folvron-F	Capsules (Each cap. contains..	Folic acid Ferrous Fumerate (64 mg.of metallic iron)	1.7 mg 194 mg	Cyanamid	4.23 / 30	3 capsules daily
8.	Ferradd	Liquid (Each 5 ml. contains	Vit-A Vit-D3 Vit B1 Vit B2 Iron and ammonium citrate Nicotinamide	2500 IU 200 IU 1 mg 1 mg 45 mg 16 mg	Parke-Davis	43.47 / 1.25 Kg	Adults: 10 ml. thrice daily Children: 2.5 ml.5ml thrice daily
9.	Fesovit Spansules	Capsules (Each cap. contains..	Vit-C Vit B2 Vit B1 Nicotinamide Vit B6 Pantothenic aid Dried Ferrous sulph.	50 mg 2 mg 2 mg 15 mg 1 mg 2.5 mg 150 mg	Eskay Lab	8.47 / 15	1-2 Cap.daily children: 1 cap. daily

...3.

Sr. No.	Compound (Name)	Formulation	Ingrediants and their quantity		Company	Cost Rs	Dose
10.	Folinate B-12	(a) Capsules (Each cap.contains..	Ferrous Fumerate Folic acid Vit B12 Vit C	250 mg 2.5 mg 0.25 mg 75 mg	Alembic	21.58 / 100	1 Cap. daily
		(b) Liquid (each 10 ml. contains.	Ferrous Fumerate Folic acid Vit B12	250 mg 4.0 mg 30 mcg		13.07 / 450 ml. *ml.	Adults: 10 ml.daily Children: 1.25 ml. - 2.5*/day Infants: 1 ml.daily
11.	Hematrine	Capsules (Each cap. contains..	Ferrous succinate Succinic Acid Folic acid Vit C Vit B12 Nicotinamide	100mg 110 mg 0.5 mg 25 mg 2.5 mcg 15 mg	Sandoz	112.36 / 500	1 cap. thrice daily or as required
12.	Heptaglobin	Liquid (Each 15 ml. contains..	Proteolysed liver Oxyhaemoglobin Peptene Iron & ammon.Citrate Nicotinic Acid Vit B12 Alcohol	1.2 gm 250 mg 750 mg 200 mg 3 mg 6 mcg 0.30 ml.	Raptakos	19.12 / 300 ml	15 ml. two or three times daily
13.	Idiglobin	(a) Capsules (Each Cap. contains..	Ferrous Fumerate Vit B12 Vit B2 Vit B1 Folic acid Nicotinamide Vit C	300 mg 10 mcg 2 mg 10 mg 2 mg 25 mg 75 mg	IDPL	28.33 / 100	One Cap. daily
		(b) Liquid (Each (5ml contains	Vit B1 Nicotinamide Folic Acid Vit B12 Ferric ammon.citrate Vit B2	5 mg 10 mg 0.5 mg 5 mcg 225 mg 2.74 mg		8.22 / 110 ml	5-10 ml. daily

Sr. No.	Compound (Name)	Formulation	Ingredients and their quantity		Company	Cost Rs	Dose
14.	Iberol	(a) Film tablets (Each tab. contains..	Ferrous sulphate	525 mg	Abbot	18.36 / 100	1-2 tab. daily
			Vit B12	12.5 mcg			
			Liver desiccated	100 mg			
			Vit C	75 mg			
			Folic Acid	1 mg			
			Vit B1	3 mg			
			Vit B2	3 mg			
			Nicolinamide	15 mg			
			Vit B6	1.5 mg			
			Cal. Pantothenate	3 mg			
		(b) Liquid (Each 5ml. contains	Ferrous sulph.	131 mg	Abbot	8.00 / 240 ml.	10 ml. twice daily
			Vit C	37.5 mg			
			Vit B12	6.25 mcg			
			Vit B1	1.5 mg			
			Vit B2	1.5 mg			
			Nicotinamide	7.5 mg			
			Vit B6	1.25 mg			
			Panthenol	2.5 mg			
			Alcohol	0.5 ml.			
		(c) Iberol-500 Liquid (Each 5 ml. contains	Ferrous Sulphate	131 mg	Abbot	14.94 / 240 ml.	10 ml. twice daily
			Vit C	125 mg			
			Vit B12	6.25 mcg			
			Vit B1	1.5 mg			
			Vit B2	1.5 mg			
			Nicotinamide	7.5 mg			
			Vit B6	1.25 mg			
			Panthenol	2.5 mg			
			Alcohol	0.5 ml			

Sr. No.	Compound (Name)	Formulation	Ingredients and their quantity		Company	Cost	Dose
15.	Livibren	Elixir (Each 10 ml. contains...	Liver concentrate Vit B1 Vit B2 Vit B12 Ferrous Sulphate Mang.Citrate Soluble Alcohol (12% V/U)	116.25 mg 2.5 mg 2.5 mg 5 mcg 273.74 mg 5.7 mg 1.25 ml	Parke-Davis	10.05 / 228 ml	10 ml. before food, twice daily
16.	Livogen	Capsules (Each Cap. contains... *V[illegible] C 75 mg	Liver concentrate Powder Dried Yeast Vit B1 Vit B2 Nicotinamide Cal. Pantothenate Folic Acid Vit B6 Vit B12 *Ferrous Fumerate	0.1 gm 25 mg 5 mg 5 mg 45 mg 5 mg 1.5 mg 1.5 mg 10 Mcg 150 mg	Allenburys	10.26 / 30	1 Cap. daily after meals
16.	[illegible] Sangobion	Capsules (Each cap. contains..	Ferrous Gluco Mang. Sulph Copper Sulph Vit C Vit B12 Folic acid Sorbitol	250 mg 0.155 mg 0.2 mg 50 Mg 7.5 mcg 1 mg 25 mg	Merck	9.61 / 30	Initially 2 cap. thrice daily after meals, followed by 1 cap. thrice daily.

Sr. No.	Compound (Name)	Formulation	Ingredients and their quantity		Company	Cost	Dose
18.	Phosfomin Iron	Elixir (Each 15 ml contains..	Cal. Glycerophos. Sod. Glycero. phos. Pot. Glycero. phos. Mang. Glycerophos Ferric ammonium Cit Vit B1 Vit B2 Vit B6 Niacinamide dl. Panthenol Vit B12 Aocohol (11% by volume)	110 mg 80 mg 20 mg 10 mg 46.5 mg 2.0 mg 1.0 mg 5 mg 15 mg 1 mg 15 mcg 1.7 ml	Sarabhai	13.57 480 ml.	15 ml. thrice daily or as required.
19.	Tonoferon	(a) Syrup (Each 5 ml. contains..)	Colloidal Ferric Hydrox Folic acid Vit B-12 Ethyl alcohol (V/V)	500 mg 1.75 mg 7 mcg 9.5 %	East India	22.00 450 ml.	2.5 - 7.5 ml. twice daily
		(b) Drops(Each 1 ml. contains..	Colloidal Ferric Hydrox L-Lysine mono-hd Vit B12 Folic Acid Ethyl Alcohol (V/V)	50 mg 200 mg 10 mcg 5 mg 9.5 %	East India	5.42 15 ml.	5 - 10 drops with milk, two-three times daily.
20.	Siderfol	Capsules (Each scap. contains..	Ferrous Fumerate Vit C Folic Acid Vit B12	300 mg 100 mg 5 mg 50 mcg	Raplakos	11.85 30	1 Cap.daily after meals or more as needed
21.	Rubragan H.P.	Capsules (Each Cap.contains.	Ferrous Fumerate Vit C Vit B6 Folic Acid Vit B12	300 mg 100 mg 10 mg 2.5 mg 50 mcg	Sarabhai	5.26 14	One Cap. twice daily.

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Sr. No.	Compound (Name)	Formulation	Ingredients and their quantity		Company	Cost	Dose
22.	Rubraplex	Elixir (Each 5 ml. contains..	Elemental iron,as ferric amm.cit. and colloidal iron	38 mg	Sarabhai	15.99 480 ml.	5 - 10 ml. thrice daily
			Vit B1	1 mg			
			Vit B2	1 mg			
			Niacinamide	5 mg			
			Vit B12	4 mcg			
			Vit B6	0.5 mg			
			d.l.panthenol	1.5 mg			
			Alcohol	12 %			
23.	Rubratone	Elixir (Each 5 ml.contains)	Ferric amm. Cit.	220 mg	Sarabhai	13.69 480 ml.	10 ml. thrice daily
			Vit B12	4.17 mcg			
			Folic acid	0.28 mg			
			Alcohol	12 %			

Source: MIMS India, February, 1985

Note : The above formulations are simply presented without comments.
You are requested to interprete them in the light of Scientific Notes.

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REPORT OF RATIONAL THERAPEUTICS CELL
MEETING HELD ON 23-6-1985

All those present were :
Drs. Arun Phatak, Anita Srivastava, Lakhani
L.N. Chauhan, Sagun Desai, Ashwin Patel and
Akshaya Upadhyaya, Tushar Shah, Nimitta Bhatt,
S. Srinivasan.

Our friends from Bombay could not attend the meeting because of the rioteering.

Agenda of the meeting was :

1) Discussion on Haematinics
2) Package Incert Material
3) Plan of Action of the Cell
4) Next Meeting.

HAEMATINICS

Background papers on Haematinics were prepared by Sagun Desai, Anita Srivastava, Rajul Desai and L.N. Chauhan.

The papers were discussed and following points were made :

Need of Fe supplement.

The bio availability of iron in vegetables is very low. So if one has to take his/her requirement of iron from vegetables only, then it becomes too bulky and expensive. Then it was pointed out that the iron is also present in cereals, jaggery and other sources which also forms a part of his/her daily food.

The iron content of breast milk is low and so it was practised till now that iron supplement should be started at 6-12 weeks of age. But now recent studies show that the bio availability of iron in breast milk is very high. So the child does not need Fe-supplement at early age, say upto six months.

Premature babies have poor iron store. In pre-mature babies if iron is given as supplement it interferes with body mechanism. So it becomes difficult to decide when and how much iron may be given to such babies.

Though the group was concerned about blackening of teeth due to liquid iron preparations. This concern is uncalled for since the staining is transient (Goodman Gilman P.1324)

A variety of substances designed to enhance the absorption of iron have been marketed, including surface-acting agents, carbohydrates, inorganic salts, amino acids and vitamins. One of the more popular of these is ascorbic acid. When present in our amount of 200 mg or more, ascorbic acid increases the absorption of medicinal iron by at least 30%. However, the increased uptake is associated with a significant increase in the incidence of side effects and therefore the addition of ascorbic acid seems to have little advantage over increasing the amount of iron administered. There is no practical benefit in employing these compounded preparations. It is particularly undesirable to use preparations that contain other compounds with therapeutic action of their own, such as Vitamin B 12, folate or cobalt, since the patient's response to the combination cannot be easily interpreted. Despite the highly specific response of iron deficiency to the element and the straight forward nature of therapy with iron, it is discouraging to see the frequency with which expensive preparations with worthless additives are prescribed (Goodman Gilman).

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Folic acid deficiency is not uncommon specially during frequency and lactation. Dimorphic anemia is also often found. So combination of Ferrous sulphate and Folic acid as advocated by WHO should be made available.

In our country where most women are anemic, we should be giving iron and folic acid supplements to all pregnant women from early frequency. The supplements should be made available through CHV's and other a paramedical health functionaries. Though much depends on the national priority some limitations of this system should also be kept in mind, like early detection of pregnancies is difficult, however effective the CHV is. After knowing the pregnancy, compliance of women to take the tablets is often very poor not only due to psychological factors but also due to untoward effects of Ferrous sulphate like gastro intestinal upsets. Question of enough resources with the PHC's is also very important. Again 90% of their energy is diverted to achieve the family planning targets.

It was also felt that only a Government is not responsible for this negligence of MCH programmes. Medical bodies are also equally responsible for not pressing the ~~xxxxxx~~ need for effective MCH programmes.

It was pointed out that the normal standards of Hb level of western population may not be applicable for our population. Then the methodological problem of how to determine normal Hb level in our population, most of which is iron deficient was raised. Dr. Aggarwal has suggested that iron supplement may be given till maximum Hb level is reached. This level may be considered as normal.

Earlier studies suggested that most side effects associated with the oral administration of iron were of psychic origin. However more recent studies have established beyond doubt that physical intolerance does occur. Higher the dose given more rapid is the response but greater is likelihood that side effects may be produced. A good policy is to initiate therapy at small doses in order to demonstrate freedom from side effects at that level and then gradually to increase the dose upto desired level.

It was also felt by one of the group members that Ferrous sulphate is easily oxidised to Ferric salts which are not readily absorbed. So ferrous fumerate which does not get oxidised very fast may be preferred. It was quite forcefully said that this is not necessary. Proper care for prevention of ferrous to ferric salts can be taken by improving the coating on the tablets. The anhydrous ferrous sulphate can also be used. A pharmaceutics - expert may be consulted+in this regard.

The enteric coated (delayed release) tablets are virtually worthless since iron is usually absorbed in upper p-art of small intestine. The capsule forms of iron preparations are available in the market but are very costly with no extra benefit. So they should be avoided.

Parentaral administration is indicated only in conditions mentioned in Paper I. Local reactions including long continued discomfort at the site of i.m. injection, local discolouration of skin, and concern about malignant change at the site of injection make the i.m. route inappropriate except when i.v. route is inaccessible. Proper care must be taken to avoid any double therapy and the patient must be informed accordingly.

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Liver extracts are not indicated in any condition. Common Vit. B 12 source for vegetarians in India is said to be contaminated water and legumes.

Formulations of most haematinics in the market are ma irrational. Very high quqntity of one component and insignificant amount of other nutrients like iron reduces them to mere economic waste. Rational multivit preparations should be made available in the market.

In geriatic complaints enzymes are prescribed. The group unanimously discarded this practice.

Line of Action of RTC

I. (i) LOCOST should try to supply the rational combination of iron and folic acid as recommended in WHO formula.

(ii) Rational multivit formulations - according to recommended daily allowances both tablets and liquids should be made availablet through LOCOST.

II. We must write articles in vernacular press regarding haematinics. Sunil Desai and Sagun Desai took up responsibilities of writing such articles. The first of the series will be prepared by Sunil Desai before 15th July 1985.

Akshaya and Tushar would help to collect statistics to make the articles more catchy. Sagun Desai to guide them to collect these statistics.

After we have 4-5 articles ready with us we could also think of having a regular health column in any newspaper.

Press releases on various topics like Haematinics, use of analgesics, antispasmodics etc. should be given. At a time only one group of drugs should be covered so as to focus the issue and avoid misrepresentation in the press. The release would be followed up by articles on the same topic.

III. RTC would try to create awareness among general practitioners by holding monthly discussions on rational therapeutics of various diseases. Dr. Lakhani to explore the logistics and with the help of Chauhan and Sagun will arrange for the first meeting in the first week of August 1985. The information about the meeting will be given as a news item in Baroda Medical Union Newsletter.

Two days workshop for fresh interns would be arranged to develop their concious opinion about rational therapeutics. Sagun Desai and Lakhani to take care of this.

IV. Letters should be written to drug authorities, questioning the rationality of many haematinic preparations in the market. S. Srinivasan to follow up.

V. We should develop a few posters for each topic for general education purposes. For this first step would be to jot down precisely the message. Artist may be contacted afterwards. Sagun Desai to contact Dr. Palan, who has interest in this sort of activities.

Package Incerts

The package incert material for ampicillin, mebendazole, paracetamol and atropine sulphate was prepared and circulated to all our partners before. Their responses were invited stating the usefulness of such a material for other drugs. They were also requested to state five drugs of priority on which they would like to have similar material.

We had received 10 responses.Salient features of their comments were discussed and some of their suggestions will be incorporated while preparing other material. Their priority drugs for such material were co-trimoxazole, Metronidazole, Chlorpromazine, DHQ and Phenylbutazone. All of them found the information useful, adequqte, clear and easy to understand.

NEXT MEETING

Next Meeting of the Cell will take place in the last week of August, 1985, - tentatively on 25th August at Baroda.

Topics for discussion will be essential drugs and antacids and enzymatic preparations. The background papers would be prepared by Sagun Desai and Lakhani respectively.

Bombay group of the Cell would select their topic and prepare background material for it. Some of those suggested were Antitusive drugs, Expectorants and Anti-amoebic drugs.

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HAEMATINICS

Dr.Anita Srivastava
M.D.(Paed.)

PART II : SOME CLINICAL ASPECTS

(A) Haematinics in children

IRON : Since dietary iron in children rarely provides sufficient replacement a supplement is required.

Oral therapy is always preferred unless the patient is unable to tolerate it or the family is not considered sufficiently dependable to administer the dose regularly.

The regular response of iron deficiency anaemia to adequate amounts of iron is an important diagnostic as well as therapeutic feature.

Oral Therapy

Oral administration of simple ferrous salts (sulfate, gluconate, frumerate) provides inexpensive and satisfactory therapy).

The recommended therapeutic dose is 4-6 mg/kg/day of elemental iron given in 3 daily doses.

Ferrous sulfate is probably the most effective and least expensive iron containing drug. Since it consists of 20% of elemental iron by weight the usual daily dose is 30 mg/kg. Doses of elemental iron in excess of 6 mg/kg/day do not result in a more rapid haematological response.

Ingestion of large amounts on milk may significantly decrease absorption of iron.

Intolerance to oral iron is extremely rare, malabsorption of oral iron is more frequently invoked than demonstrated.

While adequqte iron medication is given the family must be educated about the patient's diet and consumption of milk should be limited to a reasonable quantity preferably 500 ml/day or less.

Folic Acid Deficiency

A dose of 1-5 mg orally daily for 4-5 weeks is usually adequate to replenish the body stores even in patients with malabsorption. Patients with simple dietary deficiency can usually step therapy at this point, if they are on a proper diet, while patients with malabsorption or increased need for folate may require therapy indefinitely.

Vit.B12 deficiency

a) Therapeutic trial: Give 1-3 mcg Vit.B 12 daily i.m. for 10 days. If the pt. is B-12 deficient, the response will be as follows :

Within 24-48 hrs. the marrow will convert from megaloblastic to normoblastic morphology. Reticulocytosis should appear within 3 days and peak around the fifth day.Haemaglobin should return to normal level within 4-8 weeks.(Although folate deficient patients may respond to very high doses of B-12 they will not respond to this very low dose).

b) Subsequently 100 mcg/day i.m. for 2 weeks should be given to replenish body stores.Then 100-1000 mcg i.m. once monthly for the rest of life or until underlying disorder is cured.

c) Life threatening hypokatenia may occur during early treatment and serum K+ values should be carefully monitored.

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d) A rise in serum uric acid frequently accompanies the reticulocytosis usually reaching its peak at about the fourth day after the start of treatment. This may be prevented by allopurinol.

References

1. Mannual of paediatric therapeutics
   Ed John W. Graef Thomas E Cone Jr.
   2nd Edition

2. Nelson's Textbook of Paediatrics
   12th edition.

(B) HAEMATINICS IN OBSTETRICS

Dr L N Chauhan
M.D. (Ob.& Gyn.)

Background

Anaemia may antedate conception. It is often aggravated by pregnancy and the accidents of labour may perpetuate it.

The mean minimum acceptable Hb level to the WHO is 11.0 gm/dl (WHO 1972)

Adopting 10 gm% of Hb the incidence of anaemia in India ranges from 40-80%. In the developed countries the incidence ranges from 10-20%. Anaemia accounts from 15 to 20% of all maternal deaths in this country mostly contributeing to rather than being directly responsiblef for maternal deaths.

In pregnancy the demand for haematinics mostly Iron and Folic Acid and less commonly Vit.B.12 is increased to meet the needs of the expanding red cell mass (maximum) and requirements of the developing fetus placenta and uterine hypertrophy.

IRON

Total requirement of iron ranges from 700 to 1400 mg during pregnancy. Overall requirement for iron is 4 mg/day and 6.6 mg/day in last 4 weeks of pregnancy. This can be met only by mobilising iron stores in addition to achieving maximum absorption of dietary iron, because a normal mixed diet supplies about 14 mg of iron each day of which only 1-2 mg (5-15%) is absorbed.

Dietary iron would still not provide enough iron for the needs of pregnancy, puerperium and the lactation for a woman on a normal mixed diet. It would be still less in vegetarian diet. Since many women enter pregnancy with depleted stores. The commonest haematological problem in pregnancy is anaemia resulting from iron deficiency.

Over the years there have been many studies which have proved without doubt that iron supplements prevent the development of anaemia and that even in women on a good diet who are not apparently anaemic at booking, the mean Hb level can be raised by oral iron therapy throughout pregnancy.

A reduction of Hb is preceded by a depletion of iron stores. It is those women who enter pregnancy in precarious iron balance with normal Hb who present the most difficult diagnostic problems.

The WHO recommended the supplements of 30-60 mg/day to those pregnant women who have normal iron stores and 120-240 mg with none.

Whether all pregnant women need iron is controversial But if it is accepted that iron is necessary a bewildering number of preparations of varying expenses are available for use.

In those women to whom additional iron cannot be given by the oral route either because of non compliance or because of unacceptable side effects parenteral route can be used.

There is no haematological benefit in giving parenteral as opposed to oral iron but the failure rate of some women to take oral preparations is high and the sole advantage is that the physician can be sure that they have relieved adequate supplementation.

The majority of women tolerate the cheaper preparations with no significant side effects and in the interests of economy these should be tried first.

FOLIC ACID

Over and above pregnancy problem lactation provides an added folate stress. A folate content of 5 mcg/100 ml of human milk and a yield of 400 to 500 ml daily implies a loss of 20 to 25 mcg folate daily in breast milk.

The cause of megaloblastic anaemia in pregnancy is nearly always folate deficiency. Vita B.12 is only rately implicated.

Requirement according to WHO recommendations (1972) :
800 mcg during ante natal period
600 mcg during lactation period
400 mcg non pregnant adult.

The incidence of megoloblastic anaemia in the developing world is considerably greater and is thought to reflect the nutritional standards of the population - to the poor socio-economic status of their patients. Food folates are only partially available and the amount of folate supplied in the diet is difficult to quantify.

The main point at issue over recent years however is whether the apparently intrinsic folate deficiency of pregnancy can predispose the mother to a wide variety of other obstetric abnormalities and complications in particular abortion, fetal deformity, prematurity and ante partum haemorrhage. The extensive literature would seem to be almost equally divided in its opinion however a more recent report (Smithells at al 1980) suggests that this supplementation may prevent Neural tubal defects.

FOLIC ACID should never be given without supplemental iron. A wide variety of preparations supplying both iron and folate are available and provided that the folate is not less than 100 mcg daily, all are satisfactory for prophylaxis in pregnancy.

Vitamin B 12 : Pregnancy does not make a great impact on maternal Vit. B 12 stores. Addisonian pernicious anaemia does not usually occur during the reproductive years. However severe Vit. B 12 deficiency may be present without morphological changes in haemopoietic and other tissues. Pregnancy in such patients may be followed by death in utero or may proceed uneventfully (Chanarian 1979) . It may be associated with chronic tropical sprue.

The megaloblastic anaemia which developes is due to long standing Vit. B 12 deficiency and super added folate deficiency.

The recommended intake of Vit. B 12 is 2.0 mcg/day in me non pregnant and 3.0 mcg/day during pregnancy (WHO 1972).

This will be met by almost any diet which contains animal products. Strict vegans who will not eat any animal derived substances may have a deficient intake of Vit. B 12 and their diet should be supplemented during pregnancy.

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HAEMATINICS

PART I : Pharmacological Aspects

Dr Sagun Desai
Dr. Rajul Desai

INTRODUCTION

Anaemia is a common problem in India. which may be due to several causes but nutritional deficiency - especially of iron and folic acid - contribute to this to a large extent. A decrease in the oxygen carrying capacity of the blood is termed 'anaemia'. A reduction in the blood haemoglobin level and in the number of circulating red blood cells are the characteristics of anaemia. Drugs to correct ~~aname~~ anaemia are called 'Haematinics'. A large number of such preparations are marketed in India which vary not only in their ingredients but also in their cost. And most often they are irrational combinations.

Dr. Pierre Blaud, early in 19th century recognised many of the principles of iron therapy. He said that iron should be given at first and increased gradually. He introduced his pills, containing ferrous carbonate and sulfate. Unfortunately, a number of eminent physicians towards the end of the last century considered for purely theoretical reasons that inorganic iron could not be absorbed, so that many expensive and relatively ineffective iron preparations were developed (Unfortunately the practice is continued in modern era, ~~wean~~ even with knowledge, a paradox!) Modern research has shown that Dr. Blaud was right.

SOME FACTS ABOUT IRON METABOLISM IN BODY

Males 50mg/kg
Females 35mg/kg

- The total body iron is about 2 to 6 gms.
- Males - 50 mg./kg. of body wt.
- Females - 35 mg./kg. of body wt.
- Of the total iron nearly 2/3rd is present in the form of haemoglobin and rest is storage iron.
- Approximate daily requirement of elemental iron is
  8 - 18 mg. in children
  15 - 20 mg. in menstruating women *
  10 - 15 mg. in adult males
  20 - 25 mg. in pregnant and lactating women **

Note : Of the available elemental iron about 5-10% is absorbed in health, this increases upto 30% in anaemic subjects.

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* Monthly blood loss during menstruation roughly is 50 ml. which is equivalent to 25 mg. of elemental iron. This works out to be a loss of 0.3 to 0.6 mg./day, sometimes upto 1.5 mg./day.

** Fetus accumulates 200-400 mg. of iron, mainly in the last ~~timester~~ trimester. Further, iron is lost during child birth and later during lactation.

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- Sources of iron :

  Milk and milk products are a poor source of iron.

  Use of iron cooking utensils increases the iron content of food.

- IRON content of various foods

High iron content (more than 5 mg/100g.)		Intermediate iron content 1 to 5 mg./100 g.		Low iron content (less than 1 mg./ 100 g.)	
Non-Veg.	Vegetarian	Non-Veg.	Vegetarian	Non-Veg.	Vegetarian
Liver Heart Egg Yolk	Wheat germ Certain dried beans and fruits	Muscle Meat Fish	Most green vegetables. cereals	-	Milk and milk products Non-green vegetables

Iron is absorbed from the food throughout the gut, but chiefly in upper part of small intestine where the acid medium enhances solubility.

Most iron in food is present in ferric form.

Ferrous iron is more rapidly absorbed ~~man~~ than ferric, iron, therefore a reducing agent such as ascorbic acid (Vitamin C) greatly increases the amount of ferrous form. However substantial doses (200 mg 8 hourly with the iron) are needed to produce clinical effect and combined formulations often do not contain enough.

When iron is given in large doses, the control mechanism for absorption fails, resulting in excess absorption and eventually haemosiderosis.

Abnormalities of small intestine may interefere with either the absorption of iron as in the malabsorption syndroms and celiac disease or possibly with the conversion of iron into a soluble and reduced form. Partial gastrectomy often leads to decreased iron absorption.

In alkaline medium of most of the small intestine iron is converted into insoluble iron salts (phytates and phosphates). This leads to inabsorption of most of the orally taken iron even in severe iron deficiency.

When iron is given alongwith tetracycline it gets bound leading to inabsorption of both to a clinically significant ~~dgree~~ degree. Therefore the doses of both should be separated by at least three hours.

IRON THERAPY

Iron is indicated only for the prevention or cure of iron deficiency.

25 mg. of elemental iron/day must be available to the bone marrow if an iron deficiency anaemia is to respond with a rise of 1% of Hb (0.15 g Hb)/day.

Iron therapy is not indicated in anaemia of chronic disease like rheumatoid ~~arh~~ arthritis as there is failure of utilising stored iron and not the lack of iron.

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When oral therapy is used, it is reasonable to assume that about 30% of the iron will be absorbed and to give about 180 mg. of elemental iron daily. However calculations are not necessary except when iron is given by injection.

Total iron (i.v. required in mg

= 4.4 x body weight in kg.x Hb deficit in g / 100 ml blood.

This formula allows about 0.5 g to replenish stores. It is important to remember that with iron dextran (i.v.) all the iron is biologically available but with i.m. iron dextran about 30% of iron remains bound to muscle and with iron sorbitol i.m. about 30% is lost by renal excretion. This is taken into account when calculating an i.m. course of iron 40 mg. i.m. = 30 m.g. i.v. In pregnancy it is usual to add 0.5 g for needs of placenta, fetus and blood loss at delivery.

Iron stores are less easily replenished by oral therapy than by injection and oral therapy should be continued for at least two months after the haemoglobin concentration has returned to normal.

It is illogical to give iron in haemolytic anaemias unless there is also haemoglobinuria for the iron from the lysed cells remains in the body and haemosiderosis may ultimately occur.

Indications for Iron Therapy

1. In iron deficiency anaemia due to chronic blood loss.

2. In pregnancy - The foetus taken upto 600 mg. of iron from the mother even if she is iron deficient, but the iron stores of a baby born to an iron deficient mother may be abnormally low. Dietary iron is seldom adequate and iron should be given from the fourth month to pregnant women.

3. In various abnormalities of the gastro intestinal tract i.e. mal absorption sydromes.

4. Premature babies and babies weaned late.

5. During the treatment of pernicious anaemia alongwith hydroxocobalamin.

Oral Iron Preparations

There is an enormous variety of official and proprietary iron preparations. For each mg of elemental iron taken by mouth, ferrous sulphate is as effective and no more toxic than more expensive preparations.

Iron given in mixtures may combine with sulphide ions in the mouth and the resultant black iron sulphide causes blackening of the teeth. Besides liquid preparations are more costly.

It is particularly important to avoid initial overdosage with iron as the resulting symptoms may cause the patient to abandon therapy. A small dose is given initially and increased after a few days.

If given on a full stomach iron causes less gastro intestinal upsets but less is absorbed than if it is given between the meals.

Common preparations

Preparations	Strength	Elemtal iron	Dose
Ferrous sulphate	200 mg.	60 mg.	1-3 tabs/day
Ferrous gluconate	300 mg.	35 mg.	1-4 tabs/day
Ferrous fumerate	200 mg.	65 mg.	1-3 tabs/day.

Choice of oral iron preparations

The evidence as to which preparation provides best iron absorption with least adverse effects is conflicting. Unfortunately many of the studies on which claims for rivals preparations are made are found on close inspection to be inadequate . There is little doubt that valid comparisons can only be made with doses of preparations containing equal amount of elemental iron and under strict double blind conditions. It has been shown that gastro intestinal upsets can be greatly influenced by expectation.

The widespread use of iron preparations has stimulated many attempts to find formulations that may provide better therapy. This is a good thing. Unfortunately it has also stimulated some to make claims for their products that go beyond the evidence e.g. ignoring unfavourable and quoting only favourable evidence regardless of its scientific quality.

A suggested course for iron therapy :

- Start a patient on ferrous sulphate
- If gastro intestinal upsets, try ferrous gluconate/ succinate/furmerate.
- Addition of Vitm. C increases the amount of iron absorbed. Therefore lesser dose can be given which would decrease gastro intestinal upsets.

If simple preparations fail (this is unlikely) then pharmaceutically sophisticated and expensive preparations (slow release forms, enteric coated etc.) may be tried. From these preparations iron is slowly released resulting in decreased absorption. A similar result can be had at less cost by reducing the dose of conventional preparations.

Duration of therapy

In general a full dose as described earlier should be given until haemoglobin level comes to normal and then continued at reduced dose for two months to replenish the stores.

Parentaral iron administration

Indications -

1. Ineffective absorption from gut.

2. If a certain response is essential in a severe iron deficiency anaemia as in late pregnancy (a blood transfusion preferred)

3. Failure of oral iron for unknown reasons.

4. Poor patient compliance.

Imp : The speed of response is not quicker (as would be believed) than that with full doses of oral iron reliably taken and normally absorbed, for both provide as much iron as an active marrow can use.

Intramuscular iron sorbitol is satisfactory, but some prefer iron dextran.

Intravenous iron dextran is used. Total dose infusion (TDI) is preferred over intermitent injections.

Folic acid deficiency may be unmarked by effective iron therapy. This is liable to happen in pregnancy and so folic acid is commonly given to all pregnant women having anaemia. A similar thing happens in malabsorption syndrome.

Adverse reactions :

Mild gastro intestinal disturbances like nausea, abdominal pain constipation or diarrhoea. These can be minimised by giving it after food and initial small amounts which can then be gradually increased.

Adjuvants : to iron therapy :

Various substances claimed to enhance the efficacy of iron are Vitamin C. cobalt. copper and manganese. Vit. C may increase the iron absorption but it is not necessary to use costly iron preparations incorporating Vit.C to achieve this effect. Copper is said to mobilize iron from storage, while cobalt is claimed to stimulate erythropoictin production. Cobalt is potentially toxic. Angina, goitre and congestive cardiac failure are some of the adverse effects reported with the use of cobaltous chloride. The therapeutic value of these agents in the treatment of iron deficiency anaemia is doubtful.

In the treatment of pure iron deficiency anaemia, the use of 'shotgun' therapy containing a wide variety of expensive minerals and vitamins alongwith iron is unnecessary and wasteful.

Vitamin B 12 (cyanocobalamin)

For clinical use hydroxocobalamin is preferred.

DEficiency of vitamin B 12 in the body leads to

(I) pernicious anaemia (A megaloblastic anaemia)
(ii) subacute combined degeneration (degeneration of brain, spinal cord and peripheral nerves)

(iii) Abnormalities of epithetial tissues, particularly of the alimentary tract (e.g. sore tongue and mal absorption).

Function of Vit.B 12 and cause of megaloblastosis : Uncertain. Vit.B 12 is a conenzyme for an essential stage in folate metabolism and may affect folate transport into cells.

Daily requirement : 1 mcg. absorption mainly from ileum.

Several years' supply are normally stored throughout the body; mainly in the liver and its half life is about a year.

Man gets most of his cobalamin from meat. Cobalamin does not occur in plants (except in legumes in which it is made by bacteria in root nodules). Dietary deficiency can occur in strict vegetarians.

Indications for Vitamin B.12 =

Prevention and cure of conditions due to its deficiency.

1. Pernicious (Addisonian) anaemia
2. Malabsorption szndromes
3. Tobacco amblyopia (hydroxocobalamin used)
4. Empirically in variety of neurological conditions - peripheral neuritis (esp. diabetic)

Note : As the daily Vit.B 12 requirement is very small nutritional deficiency is uncommon even among the vegetarians in India. Majority of nutritional megaloblastic anaemias observed in India are due to folic acid deficiency.

Folic Acid (Pteroylmonoglutamic acid)

One of the B group of vitamins.

Functions :
- By itself it is inactive

- It is converted into biologically active coenzyme tetrahydrofolinic acid which is important in the biosynthesis of aminoacids and nucleic acids.

Deficiency of folic acid leads to megaloblastic anaemia probably because it is necessary for the production of purines and pyrimidines which are essential precursors of DNA.

Sources and requirements

Folic acid is widely distributed especially in green vegetables yeast and liver.

Daily requirement - about 50 mcg. A diet containing 400 mcg poly glutamates will provide this. Body stores are adequqte for several months only.

Indications : prevention and cure of the megaloblastic anaemia due to deficiency at folic acid.

1. Dietary deficiency - more common in the economically backward areas of the world.

2. Malabsorption syndromes

3. Pregnancy - requirement of folate increases from 400 mcg / day to 800 mcg/day. Mild deficiency is common with a few cases developing severe megaloblastic anaemia. For this reason many now consider that routine folic acid administration should be added to routine iron administration. The dose needed is about 300 mcg/day vigorous iron therapy in pregnancy may unmask a folic acid deficiency.

4. In chronic haemolytic states folic acid requirement is increased.

5. Drug induced folate deficiency - anticonvulsants like phenytoin primidone phenobarbitone, antimalarials like pyrimethamine and urinary antiseptics like nitrofurantoin cause folate deficiency in the body.

Notes

1. If Vit.B 12 is injected only the amount necessary for the saturation of binding sites is retained. The remaining excess is excreted in the urine. It is calculated that 80-95% of a 50 mcg dose of injected Vit.B 12 is retained. As the dose exceeds 100 mcg large proportions (50-98%) of the injected dose may appear in the urine within 48 hrs. in healthy individuals.

2. Prolonged boiling of food during cooking destroys practically most of the folate in the food.

Liver Preparations

Crude liver extract owes its activity to the presence of both Vit. B 12 and folic acid. Being a biological product liver extract is not very stable, its effect is less prompt and it is costly. The injection is painful and can give rise to allergic reactions which could be severe. Orally these preparations are not so effective and often not palatable. Because of their lower efficiency and other disadvantages, liver preparations are no more advocated in the treatment of folic acid and Vit. B 12 deficiency anaemias. In fact liver preparations have become obsolete since folic acid and Vit. B 12 are available in the pure form.

'Shotgun' antianaemia preparations :

The use of antianaemic preparations containing multiple incredients like liver, iron, folic acid, Vitamin B 12 copper cobalt and manganese must be deplored for various reasons. Some of these incredients are unnecessary, wasteful and only increase the cost of therapy. Mixed therapy can also cloud the clinical picture and may delay the accurate diagnosis of the underlying disease. Thus a favourable response to Vitamin B 12 in a case of megalablastic anaemia secondary to gastro intestinal pathology may foster false and thus abscure the correct diagnosis. The danger of giving folic acid with inadequqte Vitamin B 12 in case of undiagnosed pernicious anaemia is well known. Patients with pure iron deficiency anaemia respond to simple iron administration and an addition of Vitamin B 12 or folic acid is not justifiable. Moreover it should be noted that whenever a commercial preparation contains multiple ingredients in a mixture (combination) most of these ingredients are usually present in a inadequqte amounts.

These 'shotgun' formulations are promoted to preserve the aged in health, for anaemia and as tornics. Both their indiscriminate promotion by commercial interests and their use by physicians in undiagnosed cases shows a disregard for patients' interests that is inconsiderate at best and callous at worst.

References :

1. Goodman and Gilman's 'The Pharmacological Basis of Therapeutics' 6th Edition (1980)

2. Clinical Pharmacology by D.R. Laurence 5th Edn.(1980)

3. Pharmacology and Pharmacotherapeutics by R.S. Satoskar and S.D. Bhandarkar,8th Edn.(1983)

HAEMATINICS

PART IV

A SURVEY OF HAEMATINICS (IRON CONTAINING FORMULATIONS) AVAILABLE IN INDIA

Dr.Sagun Desai, M.D.
Dr.Rajul Desai, M.D.

1. Total No. of Formulations .. 63

2. Number of companies marketing them 37

3. Formulations

Sr.No.	Formulation Type	Number	Percentage (%)
1.	Tablets	4	6.35
2.	Capsules	29	46.03
3.	Liquids	25	39.68
4.	Injections	1	1.59
5.	Special forms drops spansules etc.	4	6.39

4. Number of ingredients

No. of ingredients	No.of formulations	Percentage (%)
One	3	4.76
Two	5	7.94
Three	3	4.76
Four	14	22.22
Five	8	12.70
Six	6	9.52
Seven	7	11.11
Eight	4	6.35
Nine	5	7.94
Ten	2	3.17
Eleven	3	4.76
Twelve	2	3.17
Thirteen	1	1.59

5. Various ingredients present :

Sr.No.	Name of the ingredient	Number	Percentage(%)
1.	Folic Acid	39	61.90
2.	Vitamin B12	52	82.54
3.	Vitamin C (Ascorbic acia)	26	41.27
4.	Other B Complex vitamins	29	46.03
5.	Liver Extract	10	15.87
6.	Enzymes/amino acids	15	23.81
7.	Trace metals	9	14.29
8.	Alcohol	14[1]	56.00[1]
9.	Other vitamins/minerals	6	9.52
10,	Haemoglobin	3	4.76
11.	Miscellaneous	3[2]	4.76[2]

1. Expressed as percentage of liquid preparations, since only liquids contained alcohol.

2. Include ingredients like dioctyl sodium sulphosuccinate (laxative) and calcium carbonate.

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6. Indications (in order of frequency) :

a) Anaemia due to nutritional deficiency)for treatment
b) Anaemia of varied aetiology (and prophylaxis
c) Pregnancy and lactation
d) Convalescence
e) Lack of appetite
f) Old age
g) Loss of vitality
h) Growth promotion
i) General - like bleeding disorders, threatened and habitual abortion, protein deficiency, post operative, pica, adolescence etc.

7. Specific contra indications and special precautions mentioned only for four (6.35 %) formulations.

8. Form of iron used

Sr.No.	Form of iron	Number	Percentage (%)
1.	Ferrous sulphate	11	17.46
2.	Ferrous fumarate	22	34.92
3.	Ferrous gluconate	2	3.17
4.	Haemoglobin	3	4.76
5.	Others	25	39.68

9. Cost of the therapy per day

Sr.No.	Range of cost/day	Number	Percentage (%)
1.	Less than 20 paisa*	1	1.59
2.	21 - 25 paisa	3	4.76
3.	26 - 50 paisa	14	22.22
4.	51 - 75 paisa	13	20.63
5.	76 - 100 paisa	11	17.46
6.	1.01 - 1.50 Rs.	10	15.87
7.	1.51 - 2.00 Rs.	3	4.76
8.	More than 2 Rs.	5	7.94

Note : Drop formulations (3) omitted.

* 11 paisa / day.

10. Comparative cost of Rational Therapy :
Prescribed treatment :

Tab. ferrous sulphate 200 mg x 3 times / day.
Tab. Folic Acid 5 mg x 2 times / day.

*Cost = 2.1 paisa for ferrous sulphate
5.0 paisa for folic acid
7.1 paisa per day.

* based on availability at Sheth Khushalchand Charitable Medical Centre as on 17-6-85

1. Tab ferrous sulphate Rup Pharma/LOCOST — 70 paisa per 100
2. Tab. folic acid Mercury / LOCOST — Rs.2.50 per 100

Alternatively :

Tab. Macrafolin-Iron (Glaxo) 1 tab. thrice a day each contains ferrous fumerate 200 mg, folic acid 750 mcg and Vitamin B 12 7.5 mcg. The cost per day works out to be 15 paisa (Rs.5/ for 100).

* Issues :

1. Capsules and liquids form nearly 86% of formulations. Tablets, only 6%
2. 83% of formulations have four or more ingredients - most of them being unnecessary.

   "Despite the highly specific response of iron deficiency to the element and the straight forward nature of therapy with iron it is discouraging to see the frequency with which expensive preparations with worthless additives are prescribed" (Goodman and Gilman, 6th edition, page 1323).
3. It is painful to see that nearly 38% formulations missed folic acid as one of the ingredients whereas more than 80% contained Vitamin B 12 and 40% Vitamin C and B Complex. What is the place of liver extract, enzymes/amino acids and trace metals, not to talk of haemoglobin in these formulations ?
4. Are all the indications justified ?
5. Only 6% formulations mention of specific contra indications and special precautions. Does it mean that 'haematinics' can be taken safely in any situation since they are considered to be 'tonics' ?
6. Though ferrous sulfate is the most effective and least expensive compound with no more toxic effects, only 17% formulations contain it whereas ferrous fumerate and other forms of iron share 35% and 40% respectively.
7. No comment is required on 'cost'. It speaks of itself.

SOURCE : MIMS India, February 1985.

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