THE NETWORK'S
NEWS LETTER
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ASSOCIATION FOR RATIONAL USE
OF MEDICATION IN PAKISTAN
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The First Step

The Network has been trying to draw the attention of Ministry of Health to the havoc caused by de-controlling the prices of medicines in June of last year. As feared, the prices of most of the drugs have gone beyond the reach of ordinary people. In certain cases, the rise was more than 300%. With the induction of a new government and changes in the Ministry, the Federal Secretary of Health took notice of the issue and called a meeting in January this year in which representatives of the industry and the Network were invited. It was decided in the meeting that the frequent increase in the drug prices should stop forth with and the prices should be frozen at the January level until 30 June 1994.

Secondly, the prices would be reviewed and where it was found that the prices have risen abnormally, they would be brought down. The Secretary also appointed a Committee to review the whole situation of the price structure and other drug regulation issues. The Committee set forth immediately and presented reports on various aspects of the situation including drug policy, drug prices and its monitoring, availability of essential drugs and drug quality. A number of useful suggestions have been forwarded to the Ministry in these areas and now it is hoped that the Government will take immediate and long term decisions to not only bring down the prices of the drugs but also ensure that essential drugs are readily available and the quality of the drugs is also maintained.

We hope that this First Step of the Ministry will lead to the formation of a rational and comprehensive National Drug Policy covering all the various areas that have been pointed out by the Committee through their reports.

Prof. Tariq Iqbal Bhutta

The Network News

* TWO SEMINARS ON RATIONAL USE OF DRUGS:

As part of its wider programme to sensitize health professionals on rational use of drugs, The Network conducted two seminars in the months of November 1993 and December 1993 at King Edward Medical College, Lahore and Pakistan Institute of Medical Sciences, Islamabad, respectively.

Specialists from these institutes, dwelled upon the appropriate use of drugs in their specialities. Both seminars were well attended with an audience ranging from young house officers to senior practitioners. Papers were presented on rational use of drugs in psychiatry, cardiology and dermatology. Along with that there were very interesting papers on "Difficulties in rational prescribing in general practice", "Antibiotics Vs Antimicrobials", "Essential drug concept", "Paediatric therapeutics - far from the ideal", "Rational use of drugs in ARI" and "Cost-effectiveness in drug therapy". Speakers included Prof. I.A.K. Tareen, Dr. Samiullah Sh., Prof. Ishfaq Khan, Prof. Tariq Iqbal Bhutta, Mr. Anjum Shafi, Dr. Shaheena Quraishy, Dr. Mehrul Hasnain, Dr. Hamid Zaib, Prof. Mushtaq A. Khan and Lt. Gen. (Retd.) Mehmud Ahmad Akhtar.

* PAPER PRESENTATION IN CPSP CONGRESS '93:

The Network Coordinator was invited by College of Physicians and Surgeons (CPSP) for presenting a paper on "Role of NGOs in promotion of rational use of drugs" in symposium on "Uses and abuses of drugs" which was a part of Congress '93. The symposium was also attended by Dr. Bala, Pharmaceutical Adviser to IOCU and Dr. Abdul Aziz Saleh from WHO/EMRO and other prominent national health professionals along with representatives of few pharmaceutical companies. CPSP is publishing the proceedings of the Congress along with the papers presented during various sessions and symposia.

* XII BIENNIAL NATIONAL PAEDIATRIC CONFERENCE, LAHORE:

The Network collaborated with Pakistan Paediatric Association (PPA) to hold a symposium on rational use of drugs during recently held XII Biennial National Paediatric Conference in Lahore. Dr. Bala from IOCU, Malaysia, Dr. Ken Harvey from Australia, José Martines from WHO, Geneva and Professor Bhutta made excellent presentations. The symposium was not well attended, however, an outcome is a set of very useful recommendations.

Thanks to Dr. Ken Harvey for his contribution.

* NETWORK'S NATIONAL LAUNCHING OF "PROBLEM DRUG" PACK:

On 13 December 1993, The Network introduced the "Problem Drug" pack to Pakistan at a launching ceremony at Karachi Press Club. The "Problem Drug" pack is a rich source of information on different drug issues and their usage. It is written by Andrew Cheatley and is published by Health Action International (HAI), The Netherlands. It has been launched in many countries and has received wide coverage through print and electronic media. The Network was one of the reviewers of this international pack. During the launch at Karachi, a panel of experts was formed to answer queries from the press. The panel included Dr. Balasubramaniam, Dr. Akhlaq un Nabi Khan, Dr. Inayat Khan and Dr. Sh. Tanveer Ahmed. Press packs, in the form of features, both in Urdu and English were distributed among the journalists. An introduction to the pack was given by the Coordinator with special reference to the local drug use situation after which the panel replied to questions. This event was very effectively covered by various important dailies and created many waves at different levels.

Request forms for the actual pack and copies of press pack for journalists can be obtained from The Network's office.

* DRAMA WORKSHOP FOR HEALTH WORKERS FROM NGOs:

From 15 to 22 December 1993, The Network conducted 8 days drama workshop on rational use of drugs. There were eleven participants from six NGOs, namely; Pattan Development Organization, Sind Graduate Association, St. Teresa's Hospital, Sungi

Development Foundation, Khwendo Kor and Pak. CDP. Trainers were Indo Mitha and Nuzhat Abbass. Under the seasoned guidance of both the trainers the participants worked very hard to eventually come up with three short plays on i) Hygiene, Sanitation and Environment, ii) Infant diarrhoea and iii) Good and Bad Medical Practices. Two songs entitled "Nutrition is better than vitamin pills" and "Infants prophylactic injections" were also produced.

The Network's expectation with the workshop is that participants will use this knowledge to develop such educative plays to be used within their health education programmes. We have already started receiving reports from participants about their useful experiences in this context.

Thanks to UNICEF and OXFAM for their support to this workshop.

* **IMPORTANT PARTICIPATON:**

Professor Akhlaque-un-Nabi Khan, Professor of Clinical Pharmacology, CPSP and council member of The Network, attended WHO sponsored "Experts Meeting on the Role of Clinical Pharmacology in Medical & Pharmacy Curricula" in Fayed, Egypt, during 19-21 November 1993 as temporary adviser of WHO.

Besides Pakistan, this meeting was attended by experts from Saudi Arabia, Bahrain, Iran, Lebanon, Morocco and from almost all the Universities of Egypt. Experts like Professor J. C. Petrie, Professor of Clinical Pharmacology at the University of Aberdeen, Professor A. T. Florence, Dean School of Pharmacy, University of London and Dr. Friedrich von Massow from Germany were also present in the meeting.

During three days proceedings, the existing situation regarding teaching of medical & pharmacy students in Clinical Pharmacology in the participating countries were presented and discussed. Professor Akhlaque-un-Nabi Khan presented a paper titled "Clinical Pharmacology Teaching - Pakistan Situation". His proposal for teaching Clinical Pharmacology by collaboration between teachers of pharmacology and clinical teachers evoked considerable interest and discussion and the idea was supported by the participants. It was emphasized during the meeting that the concepts of essential drug list, rational drug therapy and cost-effectiveness should be incorporated in the teaching programmes. It was observed that at present there was considerable gap between the principles of drug therapy taught to the students and the practices of many senior teachers. This gap needs to be drastically reduced.

The participants agreed that in most of the countries of the region, the problems regarding rational use of drugs have been identified. For most of these problems, the solutions and the required expertise are also available. However, the problems remain unsolved because of the lack of political commitment, unstable/frequently changing governments and tremendous commercial interests (cost of global drug consumption is estimated to be around $ 220 billion) resulting in unethical promotion of all sorts of drugs. The need for establishing the Adverse Drug Reaction Monitoring and Drug Efficacy & Safety Centres in the member states of the Eastern Mediterranean Region was also emphasized.

USES AND MISUSES OF VITAMINS AND MINERALS

Lt. Gen. (Retd.) Mahmud Ahmad Akhtar HI. (M)
Professor Emeritus in Medicine, Clinical Pharmacology & Therapeutics.

Dr. Zafar Mirza, The Network Coordinator.

Different vitamin and mineral preparations are widely prescribed and used. It is common to see prescriptions from qualified doctors containing one or more than one such preparations. As a result of aggressive and unethical promotion by the pharmaceutical companies and common prescriptions by the doctors, people use these preparations to improve their general state of health, to treat general weakness and body aches and pains. Another very common practice is to use vitamin and mineral preparations concomitantly with antibiotics. Strangely enough, this belief is promoted and reinforced by the doctors through their prescriptions.

One indication of the wide use of these "tonics" is that in public sector a huge share from the National Drug Bills is consumed on purchase of vitamins. The national pharmaceutical statistics of Pakistan show that vitamins are the second largest group of drugs consumed. In the year 1977, ninety million rupees and in 1986 over 400 million rupees were spent on their purchase. In private sector there is even more waste. This is despite of the fact that a clinician in this country rarely comes across cases of primary vitamin deficiencies like rickets, scurvy, hypo-prothrombinaemia and megaloblastic anaemia etc. Secondary deficiencies are also rare.

What is the rationale behind manufacturing, registering, prescribing and using all these preparations? One way of answering this question is to review and appreciate the specific indications for the use of different vitamins and minerals and their recommended doses in these indications vis à vis their normal daily requirements. (Table: 1, 2.)

Vitamin deficiency diseases are quite rare in Pakistan as is evident from the hospital sickness returns, so the large scale use of vitamins is generally a misuse. In order to rectify this situation, there is a need to rationalize the vitamin formulations so that the waste could be minimized. The formulations based on the daily requirements, as mentioned in Table:1 are thus recommended.

Market is littered with very expensive, useless and harmful preparations of vitamins and minerals in the form of tablets, capsules, syrups and injections. Some even contain hormones which may cause dangerous consequences. Many of these are even imported e.g. a calcium preparation "Ossopan" costing Rs. 4.50 per tab is imported. Isn't it an absolute waste of national resources?

"Food is the best source of vitamins and minerals. A balanced diet contains far more vitamins and minerals than the daily need of an individual. Intake of too much of vitamins is not only useless but can be harmful". It is better to have a balanced diet which provides vitamins and minerals in adequate quantities and in natural forms. Amongst the fruits guava is the richest source of vitamin C followed by mangoes and citrus fruits and *bers*. Amongst the vegetables, turnip tops, mustard green and gram leaves are richest in vitamin C . Watermelon is the richest source of carotene (vit. A) and carrots also contain it in large quantities.

The human body has vitamin reserves e.g. folic acid is stored for six months and vit B_{12} for two to three years. Primary deficiencies of vitamins are rare, however, secondary deficiencies occur in conditions like malabsorption syndrome. It is reasonable to prescribe vitamin supplements based on the estimated daily requirements (which are very small), when a patient is unable to take enough food because of gastro-intestinal disturbances.

Use of massive doses of vitamins like vitamin A for osteoarthritis and neuro-psychiatric disorders, vitamin D for osteoporosis, vitamin C for prevention of colds and influenza, vitamin B for neuritis, myalgia and sprains, vitamin K

for all types of hemorrhages, vitamin B_{12} for weakness and for all types of neurological disorders, vitamin E for sterility and coronary heart disease are conspicuous examples of innumerable misuses of vitamins being practiced since long. Use of pseudo-vitamin B_{17} (Laetrile) for cancer is a more recent example of this kind.

All objective studies have concluded that vitamin B_{12} has no appetite-stimulating properties and no role in neurological disorders other than subacute combined degeneration occurring in pernicious anaemia or other forms of vitamin B_{12} deficiency (Herbert, 1977) yet it is pathetic to note that vitamin B_{12} (Methycobal) is imported in Pakistan, wasting precious foreign exchange and promoted with information for all sorts of conditions including every type of neuropathy, weakness, anorexia and lethargy.

At present, there is a concern about vitamin A deficiency (xerophthalmia, keratomalacia etc.) and its contribution in the high rate of IMR by increasing the severity and the risk of the three main health threats facing children in low social-economic communities in some countries; diarrhoeal diseases, measels and pneumonia. However, at the same time one should be aware of the consequences of the overdosage of vitamin A. Hypervitaminosis A is a well-described paediatric entity: The most common clinical manifestation of which includes bone pain and tenderness, occasionally associated with subcutaneous induration. This is accompanied by roentgenographic findings of critical hyperostosis. Anorexia, irritability and fissuring of tongue are frequently reported. More rarely, hepatic fatty infiltration with hepatomegaly, abnormal results of liver function tests and pathologic evidence of hepatocellular damage can be found. Benign intracranial hypertension and pseudotumour cerebri also appear as a complication. In young children, administration of low doses of 20,000 to 60,000 units per day for a period of one to three months has resulted in vitamin A intoxication. The more commonly used higher doses of vitamin A upto 500,000 units per day when ingested for more than six months can produce toxic symptoms. Of course a few doses of vitamin A may be prescribed to children suffering from measles belonging to under-privileged communities.

Vitamin C in excessive doses may increase absorption of oxaluria and cause renal stones. High doses of vitamin C can destroy substantial amount of vitamin B_{12} when indigested with food. Excessive quantity of vitamin B_6 (pyridoxine) may cause a variety of neurological syndromes e.g. polyneuropathy. Large doses of vitamin B_1 may cause peripheral circulatory collapse. Anaphylactic reactions due to vitamin B complex injections are known to occur. The author has a knowledge of death of a girl due to misuse of injection B complex. There is no reason at all to give injections of vitamins to patients who can absorb easily by G.I. tract and expose them to hazards of dangerous infections like HIV, viral hepatitis etc. Toxicity due to megadoses of niacin which includes hyperglycemia, hyperuricemia, liver function disturbances, G.I. upsets, skin lesions and circulatory disturbances, is well-known. Toxic effects due to overuse of other vitamins are also being increasingly reported in the medical literature.

In addition to the toxic effects, indiscriminate use of vitamin wastes significant amount of money which is badly needed for buying food and essential drugs. It is pity to see large urban hospitals spending so much on these wasteful preparations while life saving drugs are not available in the rural areas and even in these hospitals for the poor patients. It will be correct to say that sewerage of these hospitals are depots of wasted vitamins. Inositol, biotin, choline, calcium pantothenate, glycerophosphates and lecithin are included in various multivitamin preparations though there is no evidence of their value. Likewise liver extract is obsolete but still included in some preparations.

The situation can be improved if the physicians do not allow themselves to be misled by the disinformation of the pharmaceutical industry. Public has also to be generally educated about the complications of vitamin misuse. It is a fashion with the higher socio-economic class to use vitamins as tonics. It must be stressed that the daily requirements of vitamins are very small and an average meal contains more than enough. Furthermore, the medical profession must be reminded that if "Vita" in word vitamin stands for life, min means minimum. At administrative level, the restriction of sale of preparations containing high doses of vitamins will undoubtedly be a helpful step in achieving the desired goal.

S.No.	Vitamin	DailyNormal Requirement	Major Indications / Deficiency States	Therapeutic Requirements
1.	**Vitamin A**	800 μg	1. Xerophthalmia, Keratomalacia and complete blindness. 2. Deficiency increases severity of diarrhoeal diseases, measles and pneumonia.	1. 6 months - 1 year of age; 100,000 i.u. single dose. > 1 year of age; 200,000 i.u. every 4 to 6 months. 2. 50,000 i.u. for babies suffering from measles.
2.	**Thiamine (B_1)**	1 mg	Beriberi, not seen in Pakistan.	25 mg/ml inj.
3.	**Riboflavin (B_2)**	2 mg	Primary deficiency does not exist.	
4.	**Niacin (B_3)**	20 mg	Pellagra.	100 mg 4 hourly.
5.	**Pyridoxine (B_6)**	2 mg	1. Deficieny is extremely rare. 2. Prolonged high dose of INH therapy.	10mg tablet as a prophylactic dose with prolonged INH therapy.
6.	**Cobalamin (B_{12})**	2 μg (human body has reserves for 2-3 years)	Megaloblastic anemia.	1 mg inj. 6 doses on alternate days then 1 mg inj.alternat months.
7.	**Ascorbic Acid (Vit. C)**	37.5 mg	Scurvy.	250 mg 6 hourly for 7 days.
8.	**Vitamin D**	10 mg	Rickets & osteomalacia.	2,000 to 4,000 units daily.
9	**Vitamin E**	10 mg	Therapeutic value not proven and deficiency is etremely rare.	
10.	**Vitamin K**		Hypoprothrombinemia	Inj. 1 mg/ml.
11.	**Biotin**		Therapeutic value not proven and deficiency is extremely rare.	
12.	**Folic Acid**	100 μg (human body has eserves for six months)	1. Megaloblastic Anemia. 2. Prophylactic use in pregnancy.	1. 5-15 mg daily. 2. 1 mg., not large doses.
13.	**Pantothenic Acid**	210 μg (in infants)	Therapeutic value not proven and deficiency is extremely rare	

Table : 1

Recommended Daily Dietary Allowance of Minerals

Category	Calcium (mg)	Phosphorus (mg)	Magnesium (mg)	Iron (mg)	Zinc (mg)	Iodine (μg)	Selenium (μg)
Infant	500	400	50	8	5	45	12
Childeren	800	800	120	10	10	90	25
Males	1200	1200	340	11	15	150	60
Females	1200	1200	280	15	12	150	50
Pregnant	1200	1200	320	30	15	175	65
Lactating	1200	1200	350	15	18	200	75

Modified from: Goodman & Gillman's "The Pharmacological Basis of Therapeutics", 8th edition, 1991, p1525

Table : 2

UNHEALTHY PRACTICES TO PROMOTE "HEALTH"

Dr. Inam-ul-Haq

Drugs could be rational or irrational and essential or non-essential. The matter is always under serious debate by the health professionals to identify those which are irrational or non-essential and to impress upon the Drug Regulatory Agency to ban or restrict the use of such drugs by properly invoking the Drug Act 1976. Some times, it becomes essential in order to improve the health delivery system, safeguard public health and to save the hard earned foreign exchange wasted on their import.

Lately, however, some ingenious traders have devised a new strategy with the connivance of authorities to get out of the umberalla of drug laws by importing the so called "food supplements" just to hood wink the health officials and fleece the public thus making a failure out of ignorance.

Few examples of such products are as under:-

1. **IMEDEEN** :

   A skin rejuvenating product is being imported from Sweden with the following composition.

Vit C	60.00 mg
Zinc	4.00 mg
Protein	0.10 gm
Fat	0.01 gm
Carbohydrate	0.62 gm

   The product is claimed to be a marine protein and the cost of full course is around Rs.3,600/-. A full page supplement with the recommendations of no less than the principal of Fatima Jinah Medical College, Professor Fakhr-un-Nisa and other medical specialists appeared in a local Urdu newspaper.

2. **MINUS-CAL** :

   A weight reduction herbal preparations with the following composition.

   Green Tablets (*morning*)

Folio Bucco	133 mg
Ilex Paraguariensis (Mate)	267 mg
Microcrystalline Cellulose (Avicel)	60 mg
Pectin	8 mg

   Red Tablets (*midday*)

Semen Guarana	267 mg
Cola Nut	133 mg
Avicel	60 mg
Pectin	8 mg

   Yellow Tablet (*evening*)

Folio Daminae	267 mg
Herbaverbena Offic	133 mg
Avicel	60 mg
Pectin	8 mg

   This product is being imported from Scandinavian countries at a cost of around Rs.395/- per course and claims to reduce 10 Lbs in 10 days.

3. **MODIFAST** :

   A weight reduction preparation of German origin with the following composition per sachet.

Protein	23.33 gm
Fat	0.66 gm
Carbohydrate	10.00 gm

   Plus Vitamins, Minerals, Trace elements.

The following questions are passed to the concerned government agencies and the medical elite of the country.

i. Can IMEDEEN & MODIFAST be called "food supplements" when they are claimed to contain vitamins and minerals. Similarly can MINUS-CAL containing herbs, like Guar, Bucco and damina leaves and Cola Nut etc. be called a "food supplement".

ii. Did these preparations attract the attention of MoH/Drug Registration board/ Drug Advertising Committee who are legally bound to control such products?

iii. Are they so essential and rational that they need to be imported?

iv. Why they are allowed to be imported if they are not drugs? Do they fall under the official list of

importable items?

v. Are we justified in spending huge amount of foreign exchange for the import of such non-scientific preparations when about 50% of our population have no access to essential drugs.

vi. Under whose jurisdiction these products fall? Ministry of Health or Ministry of Commerce and what action have they taken?

vii. What does the Code of Ethics of medical profession says about the unethical promotion of such products by its members?

viii. Are the various so called scientific seminars, conferences etc. held and the supplements published to promote scientific knowledge or to promote quackery for personal gains?

ADVERTISING IN MEDICAL JOURNALS

The international Committee of Medical Journal Editors issued the following statement during its meeting in Chicago in August 1993.

"Most medical journals carry advertising, and advertising generates income for owners of journals, but advertising must not be allowed to influence editorial decisions. Editors must have full responsibility for advertising policy, and readers should be able to distinguish readily between advertising and editorial matter. Juxtaposition of editorial and advertising material on the same product or subject should be avoided wherever possible. Finally, editors should consider for publication all criticism of advertisements".

Representatives of the following journals are current members of the Committee: *Annals of Internal Medicine, Medical Journal of Australia, British Medical Journal, Journal of the American Medical Association, Lancet, Tidsskrift for den Norske Laegeforening, Index Medicus, New England Journal of Medicine, New Zealand Medical Journal, Canadian Medical Association Journal, Western Medical Journal.*

"Advertising in Medical Journals", British Medical Journal, 307:795

Halofantrine: revised data sheet

Reproduced, by permission, from WHO Drug Information, 7(2): 66-67 (1993)

Halofantrine (Halfan: SmithKline Beecham Pharmaceutical, UK) is a phenanthrene-methanol antimalarial which is effective against the asexual erythrocyte stage of malaria parasites. It is indicated for the treatment of acute malaria caused by single or mixed infection of Plasmodium falciparium or P. vivax. It is administered in a total dosage of 24mg/kg given as 8mg/kg three times at six-hourly intervals. The majority of patients who have been treated with halofantrine have been affected with P. falciparum in areas where chloroquine or multidrug-resistant strains are common.

Recent research reports have alerted that the administration of halofantrine can result in prolongation of QTc intervals and ventricular dysrhythmias in susceptible individuals (1-3). There have also been some spontaneous reports of serious ventricular dysrhythmias, rarely associated with death. In total, eight cardiac arrests have been reported to the pharmaceutical company, leading to six deaths, some of which may have been associated with ventricular dysrhythmias. These cases have occurred particularly under certain conditions which include the use of doses higher than recommended, recent or concomitant treatment with mefloquine, the presence of pre-existing prolongation of QTc interval or in patients with thiamine deficiency.

An analysis of available ECG data on patients with P. falciparum malaria and in healthy volunteers indicate that:

(i) halofantrine causes an increase in QTc interval at recommended doses;
(ii) the absorption of halfontrine is increased approximately six fold when taken with a fatty meal, with additional increase in the QTc interval.

SmithKline Beecham is consequently revising the data sheet for Halfan (4). In advance of this revision WHO has been advised by the pharmaceutical company that halofantrine:

a. is contraindicated in patients with a known family history of QTc prolongation;
b. is not recommended for use in combination with drugs or clinical conditions known to prolong the QTc interval or in patients who may suffer from thiamine deficiency;
c. should not be administered to patients with a severe electrolyte imbalance;
d. treatment should not exceed the recommended total dosage of 24 mg/kg given as 8 mg/kg three times at 6-hourly intervals;
e. should be administered on an empty stomach (i.e., not given with food);
f. should only be used as an emergency self-medication for presumptive therapy in those patients known to have normal QTc intervals.

The pharmaceutical company recommends a second therapeutic course one week following the initial treatment of patients who have had no previous exposure to malaria, such as travellers from non-endemic areas.

References

1. Nosten, S., ter Kuile, F., Luxemburger, C. et al. Cardiac effects of antimalarial treatment with halofantrine, Lancet, 341: 1054-1056(1993).
2. Castol, a., Rapoport, P., Le Coz, P. Prolonged QT interval with halofantrine, Lancet, 341:1541(1993).
3. Monln, E., Pillet, O., Cochard, J.F. et al. Prolonged QT interval with halofantrine, Lancet, 341:1541(1993).
4. *Communication to WHO from SmithKline Beecham Pharmaceuticals, 24 August 1993.*

Non-availability of Essential Drugs

Network's Research

"Why don't people eat cake if they do not have bread," asked the famous Queen of her aides, as people demonstrated in front of the royal palace to complain about famine in the country. This blissful naivety can still be seen around us, in the prescription of doctors in Pakistan even though centuries have gone by since. The poor are still told to buy Tardyferon^{R}, Fefol^{R}, and Sangobion^{R} while simple ferrous sulphate at around fifty timed less cost could have had the same therapeutic benefit! Like-wise prescribing indepamide (Natrilix^{R}, Rs.6/tab.) instead of bendrofluazide (Neo-Naclex^{R}, Rs.0.15/tab.), and Methycobol (vit.B_{12} preparation, Rs.6/tab) instead of simple vitamin B_{12} (Rs.0.10/tab) are a few more examples of this common practice.

While thousands of irrational and potentially harmful drugs (e.g. 22 brain tonics, 25 liver tonics and countless cough and cold mixtures) have flooded the market, many essential drugs (effective, safe and economical) are not available. Out of a total of 270 drugs included in the WHO's "Model List of Essential drugs", 35 (13%) important drugs or formulations are not available in the market.

The result is that the manufacturer is minting money and people are suffering as the cost they have to pay in buying available drugs is unbearable.

According to Drug Act 1976 one of the conditions for registration of drugs in Pakistan is that **"Every drug shall be produced in sufficient quantity so as to ensure its regular and adequate supply in the market" !!**

LIST OF SOME IMPORTANT ESSENTIAL DRUGS ABSENT OR NOT FREELY AVAILABLE IN THE MARKET

1. Ferrous sulphate/fumarate/ gluconate/succinate.
2. Thiazide diuretics.
   (very expensive Natrilix available)
3. Nitrofurantoin.
4. Amiloride.
   (available only in fixed dose combination)
5. Triamterine.
   (available only in fixed dose combination)
6. Pyramethamine.
   (available only in fixed dose combination)
7. Quinine.
8. Niclosamide.
9. Reserpine.
   (available only in fixed dose combination)
10. Hydralazine.
11. Phenobarbitone.
12. Amphotericine.
13. Sulphasalazine.
14. Procainamide.
15. Quinidine.
16. Sodium nitroprusside.
17. Guanethidine.
18. Theophylline.
    (available only as expensive brand)
19. Aminophylline.
20. Iron sorbitol.
21. Oral fluoride.
22. Vitamin-D.
23. Colchicine.
24. Hyoscine injection.
25. Ephedrine injection.
26. Propanthelin.
27. Thiabendazole.
28. Diazepam suppository.
29. Paracetamol suppository.
30. Prochloperazine suppository.
31. Metronidazole suppository.
32. Activated charcoal.
33. Ipratropium inhaler.
34. Flumenazil.
35. Cholestyramine.
36. Methionine.
37. Sodium thiosulphate.
38. Sodium nitrite injection.
39. Mupocrine ointment.
40. Fucidic acid.
41. Acetyle cystine.
42. Pitressin injection.
43. Bupivacaine.
44. Indomethacine suppository.
45. Codein phosphate.
46. Deferoxamine mesilate.
47. Dimercaprol.
48. Praziquantel.
49. Metrifonate.
50. Proguanil.
51. Biperiden.

PRIORITIES FOR PUBLICATION OF ARTICLES ON DRUGS IN THE NETWORK'S NEWSLETTER

Interested readers are requested to send their write-ups on drugs keeping in view the following priorities:

1. Drugs which are not recommended for use in the scientific books of Medicine, Pharmacology, Surgery etc. i.e. have not established their therapeutic validity. In this group priority for publication should be given to the drugs which are aggressively and unethically promoted by the companies by literature, symposia etc. and are prescribed at larger scale by the doctors.
2. Drugs with doubtful efficacy although these are included in the scientific books.
3. The drugs for which better cost effective substitutes are available.
4. Drugs which are banned in their countries of origin.

Editor

FLUOXETINE

(PROZAC[R])

It is one of the latest antidepressants with selective serotonin re-uptake inhibition action. The other one available in this class is fluvoxamine (Faverin). Fluoxetine is very expensive as compared to the other anti - depressants. It is promoted aggressively with claims of low side-effects. In an intensive study (*Funjian et al, BMJ, 13 March 1993, p683-688*) it has been established that this drug has no extra advantage in efficacy and acceptability over 1st generation tricyclics.

Price		One tab	One month treatment
			in Pak. Rupee
Imipramine (Tofranil)	75mg tab.	0.86	75 to 130
Dothiepin (Prothiaden)	75mg tab.	1.20	32 to 64
Amitryptiline(Tryptanol)	75mg tab.	1.50	45 to 90
Mianserin (Lantanon)	30mg tab.	5.50	152 to 456
Amineptine(Survector)	100mg tab.	6.00	180 to 360
Fluvoxamine (Faverin)	50mg tab.	11.00	330.00
Fluoxetine (PROZAC)	20mg cap.	60.00	1800.00

THIAZIDES

Thiazides are few of the most important essential drugs. Unfortunately, they are not available in the country as single ingredient drugs though available in the form of combinations e.g Moduretic, in combination with beta-blockers, ACE inhibitors etc. Thiazides are effective anti-hypertensives and infact the only group which has proved its effectiveness in preventing cardiovascular accidents in the old age group. They are also useful in mild oedemas, hypercalciuria, primary tubular acidosis etc. They are inexpensive therefore within the reach of a common man. It is well proved that in uncomplicated hypertension, the use of thiazides does not cause hypokalaemia and therefore in large majority of patients there is no need of providing potassium supplements or combining it with K^+ retainer diuretic. If used unscrupulously, this combination can cause K^+ retention and hyperkalaemia which itself may lead to dangerous consequences. Rarely, if a patient develop hypokalaemia after a prolong course then a combination of thiazide with a potassium retainer may be prescribed.

One such important thiazide is bendrofluazide (Neo-Naclex) 1.25mg. It is pity that such a useful essential drug which is within the reach of a common man is not available and the patients are forced to take expensive, most of the times useless and at times harmful combinations. Another related drug "Natrilix" which is extremely expensive and without any advantage is promoted aggressively with disinformation that it has no side-effects.

Price	One tab	One month treatment
		in Pak. Rupee
Bendrofluazide (Neo-naclex)	0.14	3.50
Moduretic (Combination of thiazide & amiloride)	1.07	32.00
Dyazide (Combination of thiazide & triamterene	1.06	32.00

NSAID'S LOCAL APPLICATIONS

A pharmaceutical company has recently organized symposia all over the country in which "Feldene Gel" was promoted. The true facts are as follows:

Salicylate local applications are inexpensive and produce effects by counter irritation. Unfortunately, expensive preparations like Feldene[R] gel, Bruffen[R] cream etc. are registered and promoted. These preparations have no extra advantage over the locally acting salicylates but the patients and the nation is made to suffer the financial losses without any additional benefit. A 25 gm tube of salicylate counter irritant costs Rs.5 to 10 while 25gm of Feldene gel costs Rs.97.50. Is there any justification for such like preparations in a poor country like ours? It is pity that true facts are not placed before doctors by the manufacturers and the Ministry of Health. Many of our doctors belonging to the elite group are in the fore-front to mislead the junior doctors and the public.

FROM THE PRESS

World

Pakistan pharma price outcry

A public looks set to break out over the Pakistani government's recent deregulation of prices for about 800 pharmaceuticals.

The Association for Rational Use of Medication has called on the government to rescind the decision immediately. It said that state hospitals would not be able to afford drugs whose prices could rise by between 500-700%.

The Pakistan newspaper, Dawn, has suggested setting up a pharmaceutical price rationalisation committee. Its duties would include collecting information on raw and packaging material prices, and recommending price levels. The committee would also review the function of government agencies such as inspection services and drug testing laboratories and check Ministry of Health drug price data - "the fact is that the Ministry is not sure of the latest prices of various drugs", Dawn alleges.

Dawn says that a comparison of the market price of pharmaceuticals with that at which the government purchases the same products shows that current market prices "are on the high side". The newspaper gives the following details of uniform and government purchase price (US $1 = Rs.31.40):

Product	Market price	Government Purchase price
ampicillin suspension	15.22	7.00
erythromycin suspension	22.89	14.95
metoclopramide syrup	16.26[1]	4.25[2]
metoclopramide tabs	107.04	11.00
doxycycline caps	3.06	0.76
dexamethasone tabs	290.00	41.95
diazepam 2mg	110.00	10.15
diazepam 5mg	220.00	10.50
ibuprofen 200mg	246.38	77.73
indomethacin 25mg	131.40	65.00
metronidazole 200mg	65.00	22.00
metronidazole 400mg	109.00	40.00
cotrimoxazole tabs	164.25	95.00
furazolidone 100mg	43.66	19.00

[1] 100ml; [2] 50ml

Dawn also says that a recent pharmaceutical price comparison chart published in leading newspaper by the Pakistan PMA to show how low drug prices were in fact indicates the opposite. The average price for 13 products, including Tagamet (cimetidine), Zantac (ranitidine), ampicillin and erythromycin, was $8.21 in Pakistan, compared with $6.27 in India and $4.79 in Bangladesh.

The deregulation (Scrip No.1835, p 18) allows manufacturers to raise prices of their formulations to the new retail price of branded products. The government has asked pharmaceutical manufacturers to implement increases cautiously and warned that it may rescind the deregulation if there is wide public protest.

SCRIP No. 1844 August 6th 1993 p 20.

from:
The Muslim Saturday, February 5, 1994
"Letter to the Editor"

The unscrupulous multinationals

Some National dailies carried a news report on Jan 28, 1994 on drug registration board's decision to ban Periactin BC, an appetite stimulant. This news item quotes "official sources" saying that "the decision has been taken in the light of the report prepared by the special fact finding committee appointed by the former health minister last year ..... "To keep the record straight and highlight the background of this decision, I have the following facts to bring forward:

1. Periactin BC has already been withdrawn by the manufacturer Merck Sharp & Dhome (USA). A press release to this effect was issued by the company on Nov. 2, 1993. Giving the background, this press release says, "over the years, some medical people have questioned the appetite stimulation use and have been inappropriately used particularly in children, in certain developing countries .... "

2. The daily Dawn reporting this withdrawal on Nov. 17, 1993 began by saying: "worldwide campaign by health activists has forced a leading American company to withdraw a top selling medicine which was being sold as an appetite stimulant in Pakistan and other Third World countries". The daily Muslim of Nov. 16, 1993 said: "Although the health activists have welcomed this much needed ethical decision by MSD they are disappointed that the Ministry of Health did not play its due role in controlling the misuse of medicines like Periactin BC. For the last many years health activists have been demanding of the ministry to take strict action against such multinational companies which were selling those medicines in Pakistan banned in their countries of origin. This report goes on to say, "the health activists have particularly campaigned against Beriactin BC and Mosegor ...."

3. The committee formed by the former health minister on March 3, 1993 to probe the sale of drugs banned in their countries of origin was to submit a comprehensive report within three weeks. This committee could not even meet as the government kept changing.

This decision has been a result of the hue and cry raised by the, otherwise, uncomplaining people of this country who have been oppressed by the high handedness of pharmaceutical companies who have raised prices to unbearable heights and are using Pakistan as dumping ground for obsolete and toxic drugs which are not allowed in their own industrialised countries.

Dr. Zafar Mirza, Islamabad

Govt sets up committee to control drugs prices

By Shahzad Alam Khan

ISLAMABAD: In response to a series of reports appearing in the national press, the federal government has taken several steps to streamline and control the prices and quality of drugs and to develop an effective monitoring system.

The government has transferred the Controller Drugs, Sabihuddin Ahmad, and appointed him as Chairman Quality Control Authority (CQCA) vice Dr Fazli who was presently working as CQCA has been posted as Controller Drugs.

"It's a routine matter and there is no reason behind this reshuffle," Secretary Health A A Nasim said while talking to this correspondent on Monday.

As a second measure, the Federal Government has constituted a Health Committee to regularise prices and registration of drugs in the country.

"The committee has been formed to develop a programme for a continuous scrutiny on price structure, registration and deregistration of drugs, and to develop an effective drug monitoring system," Secretary Health commented.

The committee members are: Secretary Health, Director General Health, Lt Gen Mehmood Ahmad Akhtar, Dr Tariq Iqbal Bhutta (pioneer Network of Association for Rational Use of Medication in Pakistan), Dr Zafar Mirza, Dr Inamul Ha[illegible] and Zafar Muraj, executive direct[illegible] Pharma Bureau.

The committee will meet under Secretary Health on Tuesday to discuss the present drug scenario. Issues like drug prices, registration and deregistration of the drugs and the introduction of the drug monitoring system will be discussed during the meeting.

Drug Price Freezing and Formation of Expert Drug Committee

In face of exorbitant drug prices after partial de-control on 12th June 1993, Ministry of Health eventually took a right step to make pharmaceutical industry announce an immediate drug price freeze till 30th June 94. Immediately after that on 17th January 93 an Expert Drug Committee, under section 10 of Drug Act, 1976, was announced. Three Network Council members and Network coordinator were included in the committee along with representatives of PPMA, Pharma Bureau and Chemists Association. Committee is headed by Federal Secretary Health with Director General Health as another member and Federal Drug Controller serving as secretary to the committee.

During first meeting a working group was formed within the committee under the guidance of Chairman of the Network Council Lt. Gen.(Retd.) Mehmud Ahmad Akhtar with Network coordinator as its rapporteur. Until now, the working group has submitted three reports including one on drug pricing policy and another on six priority issues related to drug regulation system in the country.

In these reports we have shown our serious concerns about absent National Drug Policy, non-existence of any legal and rational drug pricing policy with special reference to halting the **transfer pricing** by the MNCs and the need for having it before 30 June 1994, lest we experience another spell of price hiking by the manufacturers.