swasth hind

september 1986

swasth hind

Bhadra-Asvina — September 1986

Saka 1908 — Vol. XXX, No. 9

OBJECTIVES

Swasth Hind (Healthy India) is a monthly journal published by the Central Health Education Bureau, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India, New Delhi. Some of its important objectives and aims are to:

REPORT and interpret the policies, plans, programmes and achievements of the Union Ministry of Health and Family Welfare.

ACT as a medium of exchange of information on health activities of the Central and State Health Organizations.

FOCUS attention on the major public health problems in India and to report on the latest trends in public health.

KEEP in touch with health and welfare workers and agencies in India and abroad.

REPORT on important seminars, conferences, discussions, etc., on health topics.

OUR COVER

The control of many diseases in many parts of the world has been facilitated by positive changes in health behaviour which accompanied higher levels of education and literacy. That, indeed, is one of the significant features of the observance of International Literacy Day 8 September. Our cover shows children learning to read and write.

In this Issue

Editorial and Business Offices
Central Health Education Bureau
(Directorate General of Health Services)
Kotla Marg, New Delhi-110 002

Single Copy	**25 Paise**
Annual	**Rs. 3.00**

(Postage Free)

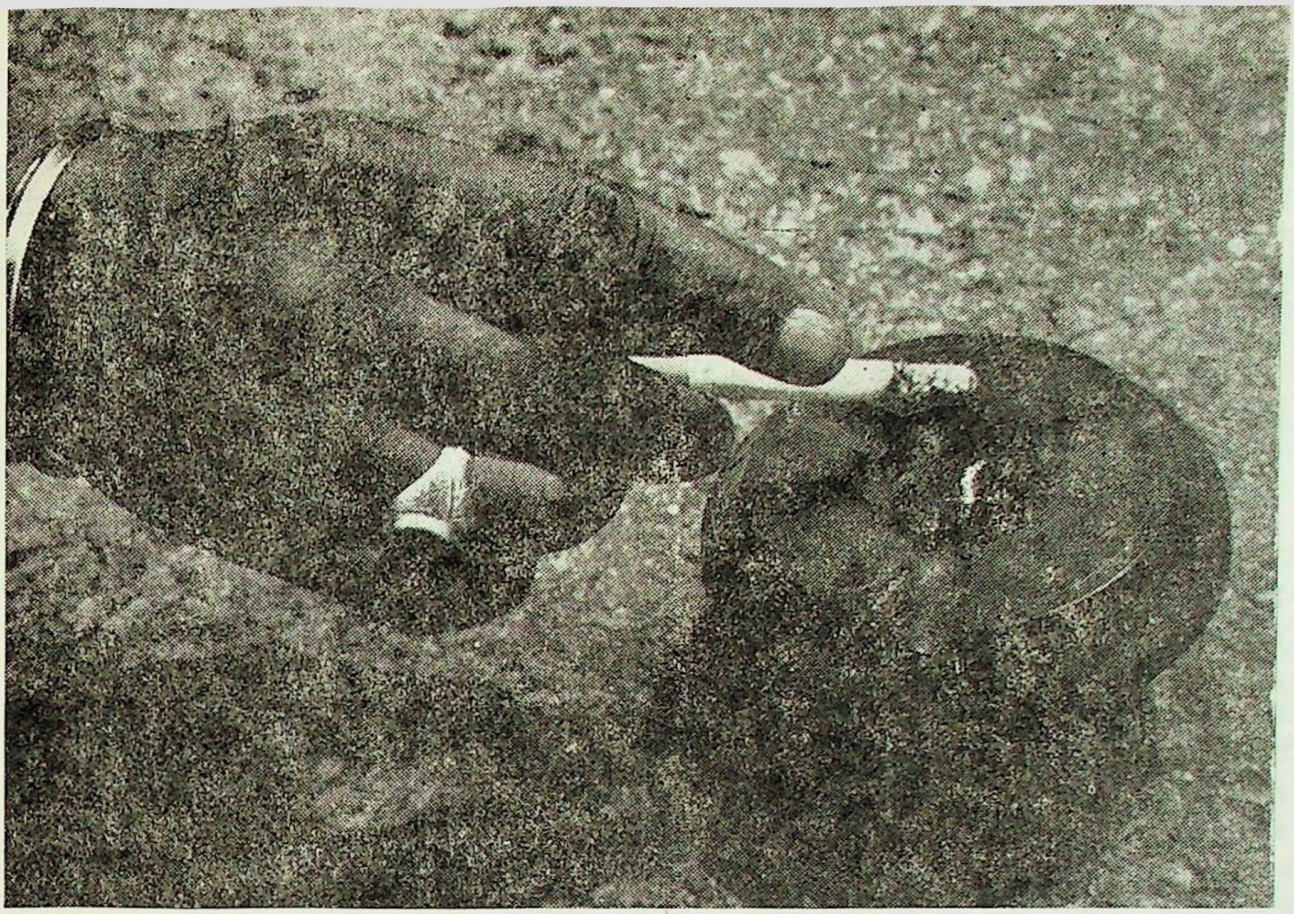
Articles on health topics are invited for publication in this Journal.

State Health Directorates are requested to send reports of their activities for publication.

The opinions expressed by the contributors are not necessarily those of the Government of India.

SWASTH HIND reserves the right to edit the articles sent for publication.

ASM



SMOKING, ALCOHOL AND DRUGS

THROUGHOUT history, human societies have recognised certain substances of natural origin which either offer temporarily heightened perceptions or suggest an escape route from the unpleasant features of life, whether real or imaginary. Fermented liquor from fruit or vegetables, or plant products such as opium, coca leaves, cannabis, khat and tobacco have been accepted in varying degrees as social lubricants or as private escape mechanisms.

The drinking of wine and other fermented liquors were chronicled in the earliest literature known to us. But in comparatively recent times, voices have been raised against many such substances. For instance King James I of England, around the year 1600, inveighed against tobacco. It was, he wrote, "a great contempt of God's good gifts that the sweetness of man's breath.....shall be wilfully corrupted by this stinking smoke." For good measure, he added that the habit was "a branch of the sin of drunkenness, which is the root of all sins."

But for every such grumbler, there were scores of poets, philosophers and physicians willing to speak out in praise of drinking, smoking or chewing one or another drug. What has come more slowly to the attention of the world is the realisation that these substances produce addiction, and lend themselves to abuse.

In the case of cigarettes, their mass production coincided with the First World War, when they were handed out virtually free as meagre compensation to soldiers enduring desperate conditions in the trenches. It has taken many decades for medical science to confirm the causal relationship between smoking and such illnesses as lung cancer, ischaemic heart disease and bronchitis.

Undoubtedly it could be said of alcohol, as it is already said of tobacco, that if these substances were invented and put on the market today, both would promptly be condemned and outlawed by all countries' food and drug authorities. This has already been the fate of heroin and its derivatives, the hallucinogenic drugs, and the many pharmaceutical products which were created to ease pain or treat disease but unfortunately turned out to lead to dependence and abuse.

The positive response to all these substances is to find and promote worthwhile social alternatives to addictive behaviour. While more pressure can be brought to bear on governments to tighten the borders around drug-producing countries or to increase prices of alcohol and tobacco, people must be left with an open choice.

If individuals esteem their own health and that of others sufficiently highly, they are less likely to indulge in harmful practices. In the words of this year's World Health Day slogan: **Healthy living—everyone a winner.** ●

SMOKING

A SMOKE-FREE SOCIETY BY THE YEAR 2000

K. BALAN

Intensive anti-smoking campaigns and research together with rigid Government control have led to the decline of smoking habit in the developed countries, particularly in the West. On the other hand, cigarette smoking has established a firm footing in the third world. To change this situation, and to achieve the goal of a smoke-free society by 2000 A. D. is, indeed, a herculian task.

THE goal, Health for all by 2000 A.D. is good for all and is essential for creating a healthy society. But, in the third world countries in general and in India in particular, where the majority of inhabitants are inseparably habituated to smoking, the idea of a Smoke-Free Society by 2000 A.D. is likely to be pooh-poohed as an unrealistic proposition; may some people may even dismiss it as a nonsense. But if we go deep into the subject, we can see that there is some commonsense in ths discussion. In the present day smoking complex, which involves not only physiology but also the whole range of social and personal behaviour, it seems to be an impracticable goal. However, it is an indispensable one to achieve the goal of Health for All by 2000 A.D.

Intensive anti-smoking campaigns and research together with rigid Government controls have led to the decline of smoking habit in the developed countries, particularly in the West. And the cigarette has gained its losing status in the third world and to know how they did it, look at these words of a specialist writer when he says "it is being actively promoted by massive advertising campaigns in the third world countries, as a mark of sophistication just as it loses its status in highly developed countries". Now, influenced by the advertisements, cigarette smoking has established a firm footing in the third world and the majority inhabitants are smokers. To change this situation, and to achieve the goal of a Smoke-Free Society by 2000 A.D. is indeed a herculian task.

But, for the Surgeon-General of US, it seems to be an easy goal. Having convinced that cigarette smoking is responsible for 80-90% of the lung cancer deaths and the primary risk factor for heart diseases and other irreparable damages to organs and that smoking is the largest single preventable cause of ill-health and death in the world, the Surgeon-General has called for a Smoke Free Society by 2000 A.D. By a strange coincidence, the call came in the centennial year of the invention of cigarette making machine by James Bansack. And there is no doubt that with the present tempo of decline in smoking in developed countries, and with the intensive research and anti-smoking campaigns and controls, the developed countries are well within the reach of the goal.

But what about the third world? In India, for instance, the advertisements have merged the cigarette smoking habit with human behaviour and the massive ignorance about the dire consequences of cigarette smoking stands as a stumbling block in this direction.

In developing countries like India, the mild slogan "cigarette smoking is injurious to health" which is the only active expert in the field to educate people, seems to be overburdened with this task and is having either a little effect or no effect at all. With the result, from elders the habit is fast-spreading among teenagers. According to survey report of the World Health Organisation, 9% of the teenaged boys and 6% of the teenaged girls in India are smokers. And the increase in smoking among little girls is linked to the behaviour resulting from increased women's status. But as insiders, we can imagine that this is only a tip of the iceberg, for majority of teenagers smoke in private giving no scope for a survey or for counting their head. Thus the habit of smoking in India is spreading like fire and the hungry and idle men and women are always after it to satisfy an unknown urge. This belies the scope for a Free Smoke Zone in India.

The goal of a Smoke Free Society is aimed at the younger people, say upto the age of 18 or 25, and if we watch the encouraging results of developed countries in this direction, it seems to be an approachable one. But there is need for public awareness, a will and determination on the part of the young people, properly planned anti-smoking campaigns and educational strategies, legislation and Governmental controls to make the task easy and result-oriented. At the same time, smoking among elders has to be controlled and curtailed by self-restraint, self-education and by anti-smoking agents. Survey in developed countries has revealed that 80% of the smokers are willing to cut down or stop the habit but they are unable to do so. This indicates the desire on the part of the smokers to cut down and discontinue the habit provided there is proper control and guidance.

Reasons and causes

Why does one Smoke? The real reason and cause for smoking is unknown even to many heavy smokers. Some say, it is an urge while others aver it as an acquired habit. Yet others say it is a temptation without a base. For children or teenagers, it is nothing but a fashion imitated from elders at home and outside. In the past, even elderly children smoked without the knowledge of parents or relatives fearing them. But today, many children smoke in front of their parents or along with them thanks to the growth of modernism in Indian Life. Young people, they say, smoke for avoiding idleness or monotony and to stimulate thinking. Elders smoke to get rid of worries and to get satisfaction. Some say that smoking makes drinking tasty while others just do not know why they do it. These are the reasons and causes of smoking. But smoking habit increases as a fashion and status and spreads like a disease but without a virus like that of 'AIDS' to spread it. Still the Director-General of WHO calls it as the No. 1 preventable cause of death in the world. Since there is no virus involved, it is indeed easy to control it.

Health hazards of smoking

The great damage done by cigarette smoking to the physical system of men has already been exposed by research in developed countries. From what is already known, we can very well imagine that the risk of cigarette smoking is very high. The Institute of Neurology Academy of Medical Sciences of the USSR and a number of American, British and Japanese clinics have demonstrated that incidence of heart diseases and lung cancer can be reduced considerably by taking action against the risk factor. The primary target suggested was the control of smoking, the main risk factor both for heart diseases and lung cancer as well as for peptic ulcer and chronic diseases of lungs and other diseases. The World Conference on Smoking and Health held in Canada in July 1983 discussed the great dangers of smoking and made various recommendations. Considering the high risk of ill-health acquired by smoking the Norwegian Medical Association proposed that the country in effect be declared a Cigarette Free Zone. Being conscious of imminent danger, the American Medical Association has called for a complete ban on cigarette advertisements. In the Soviet Union, smoking is banned in all public places including the Soviet underground rail system. All these actions are being taken to minimize the risk of smoking and to reach the goal of a Smoke Free Society by 2000 A.D.

According to authoritative reports, one million people die prematurely in the world every year due to smoking. Thousands of deaths in the USA are associated with smoking according to medical reports from that country. The anti-smoking campaign in the US is now turning to Courts as evidenced by the growing number of law suits that seek to fix responsibility to ill-health and death of smokers on tobacco industry. Reports in the Wall Street Journal state that the doctrine of "Product liability" is central to the increasing number of legal challenges of recent times.

The Royal College of Physicians of the UK compares the toll in human life wrought by smoking to that of "devastating epidemics of infectious diseases of the past".

Tobacco or Health

The 39th World Health Assembly, in a resolution while affirming that tobacco smoking and its use in all forms is incompatible with the attainment of health for all by the year 2000, called for a global public approach and action to combat it. It urged its Member Countries and all organizations of the U.N. system to support WHO in all possible ways in stemming the spread of tobacco-induced diseases by protecting non-smokers on their premises. The Director-General of WHO was requested to ensure that the Organization plays an effective global advocacy role on tobacco and health issues.

Tobacco smoking in India has been prevalent since time immemorial. Over the years the practice has spread all over the country — in both rural and urban areas. Smoking of cigarettes and bidis is fairly common, while the hookah is also used in the rural areas. Tobacco chewing with betel is also fairly common. Tobacco is also used in the form of snuff; however, this is not as widespread as tobacco smoking.

Putting at not less than 1,00,000 deaths yearly, associated with smoking in the U.K., the physicians had called upon their country's health administration to "tackle cigarette smoking with the urgency given to cholera, diphtheria, polio and T.B.".

Whereas in developing countries there are no such calls or discussions in the Medical or Science Congress about it. There is only an ineffective mild slogan "cigarette smoking is injurious to health" that does the entire job in the country. There is an urgent need for a shift of thinking on this issue and result-oriented actions to find out the role played by smoking on the health of the people which will be many fold higher than those in the developed countries in view of the poor living conditions.

Danger to non-smokers

Research spread over several years has proved that smoking effects the non-smokers and passive smokers too. An international symposium organized in 1985 in Vienna jointly by the Austrian Society for Industrial Medicine, the German Society for Occuptional Medicine, the American Health Foundation, WHO and the International Green Cross discussed at length their findings in passive smokers. Tobacco smoke so far has been found to contain 6000 chemical substances and their potentially damaging effect on active smokers are well known. Many of these substances, which go out in smoke, affect the people who are not smokers contributing to their ill-health.

Research studies in developed countries have brought to light that the children of smoking parents have higher risks of respiratory ailments. Long-term epidemiological studies in the National Cancer Centre Research Institute, Tokyo, have found that the risk of lung cancer from smoking husband to non-smoking wife is very high and it varies from the number of cigarettes one smokes daily. The risk is found to be more in case of heavy smokers. Suffers of asthma, allergy, bronchitis, small children and pregnant women are easily susceptible to the harmful substances of smoke. In countries like Canada, the right of non-smokers to pure air has priority over the right of the smokers to indulge in private habit.

New strategies to fight

To help the anti-smoking campaign, the Expert Committee of WHO had earlier recommended the following action plan: (1) non-smoking as a social norm, (2) total prohibition of all forms of tobacco promotion, (3) the establishment of upper limit for tar, nicotine and carbon monoxide, and (4) listing their levels in all cigarette packages.

Developed nations are far ahead of us in anti-smoking campaigns. Soviet Union has now developed an effective anti-smoking agent called "ANABASINUM". It mitigates the inclination to smoke and minimize vegetative disorders that generally accompany the period of coming out of smoking habit. In the US, Cigarette commercials are already banned in TV and Radio. Realising the ineffectiveness of mild slogans in existence there, US have introduced more serious solgans like: Surgeon-Generals warning—"Smoke contains carbon monoxide", "Smoke causes lung cancer, heart diseases, emphysema and may complicate pregnancy" and "quitting smoking now greatly reduces serious risks to your health". Obviously, this has started to reduce the habit among the people to a great extent.

In the Soviet Union, posters issued by the National Institute of Health education say "STOP SMOKING—TOBACCO IS POISON".

It is urgent that the third world countries too should embark upon new strategies to combat the menace of smoking and establish a Smoke Free Society by 2000 A.D. It is not good for the teenagers, not good for the family, and not good for the nation to encourage smoking among the teenagers and young people. It is not good for the cigarette firms to sell cigarettes to teenagers and make money, for by doing so, they are spoiling the health of the new generation. We should not allow the cigarette to sow the seeds of diseases before the physiological formulations complete its growth in the younger people, and that if done, will erode the health of the new generation. So much so, the teenagers and the young people upto the age of 25 should be the first target group in this direction. The rest

of the population should be treated as the second target group for the purpose of anti-smoking campaigns.

Anti-smoking campaigns against these two groups should be rigid, stimulative and result-oriented. All possible audio-visual facilities should be used. TV, Radio, cinema, advertisements, notices, folders, stickers, lessons in educational curriculum, counter propaganda in newspapers and periodicals, and other educational publications together with needed legislation and Government control will help a lot in this direction.

Against the first target group aged upto 25, the following measures will help to expedite the control and curtailment of the habit:

(a) Strict control at home to cut down the habit among teenagers.

(b) No cigarette sale to teenagers.

(c) Legislation making cigarette a product of adults.

(d) Ban on smoking in all educational institutions both during and outside working hours.

(e) Exhibition of films and other posters in and around educational institutions.

(f) Health education material in the curriculum.

Also necessary are new and effective posters, new health education strategies, rigid government controls, celebration of anti-smoking week every year, exhibition of short films compulsorily in all theatres and making of new variety of films based on the findings all over the world, and printing of more serious slogans in the cigarette packages in regional languages. All these activities, together with public awareness and co-operation will go a long way in achieving the goal of a Smoke Free Society by 2000 AD. ●

LEGISLATION AND HEALTH WARNINGS

The Government of India has stepped in, in a positive way, to provide legislative support to the anti-smoking campaign. "The Cigarettes (Regulation of Production, Supply and Distribution) Act 1975", which came into force with effect from 1 April 1976, requires all manufacturers or persons trading in cigarettes to display prominently the statutory warning "Cigarette Smoking is Injurious to Health" on all cartons or packets of cigarettes that are put on sale. A similar warning is also required to be displayed prominently on all advertisements.

Whole body CT Scanner at AIIMS

The All India Institute of Medical Sciences, New Delhi, has acquired a very sophisticated computerised Whole Body Scanner. It can be used for imaging any abnormality in the body resulting in an extra growth or causing a void in the body. Such abnormality may fall in any of the four categories, namely, congenital, inflammation, trauma or neoplastic changes. This can scan any minute part in the body, including the head.

This is one of the latest and most sophisticated Whole Body CT Scanners now available in the capital. Already, such scanners have been functioning at G. B. Pant Hospital, Sir Ganga Ram Hospital and Delhi Scan Research Centre with optimum use, the CT Scanner can handle 8-10 patients every day. The Institute has decided to charge Rs. 750/- from the patients registered at the AIIMS Hospital, Rs. 1000/- from the patients admitted into the Paying Ward rooms and Rs. 1500/- from patients referred from outside. ●

SMOKING

SMOKING AND ITS HAZARDS — WHAT ONE SHOULD KNOW?

Lt. Col A. C. Urmil
Col P. K. Dutta

Nicotine is revengeful to everybody irrespective of the form in which tobacco is smoked, be it cigarette, *bidi*, *hookah*, *chillum*, cigar or pipe. It pays no heed to the appeal that the individual is only a mild or moderate smoker and not a heavy smoker.

Love lady. Nicotine. risks your life. Today, it is known that smoking is probably the largest single preventable cause of ill-health in the world. The epidemic of smoking related diseases is of such magnitude as to rival only infectious diseases or malnutrition as a public health problem in developing countries. The findings of the Royal College of Physicians mention that one in three cigarette smokers dies prematurely as a result of cigarette smoking and that, on an average, each cigarette smoked shortens the life of the smoker by five-and-a-half minutes. It has been estimated that, in the world as a whole cigarette smoking is responsible for more than 1 million premature deaths each year. Statistics show that 90% of all lung cancer deaths, 25 per cent of deaths from cardiovascular diseases and 75 per cent of all deaths from chronic bronchitis stem directly from smoking. Perhaps 10 per cent of all deaths among smokers are attributable to this habit.

The studies in India shown that the lung cancer risk for cigarette smokers is nearly nine times more than for non-smokers. Japan and the USA record relatively low incidence of lung cancer despite high cigarette consumption—one reason may be these smokers discard larger cigarette ends. Cigarette smokers in the UK and possibly in India, are three times more likely to suffer from chronic bronchitis than non-smokers. It has also been observed that the intensity of smoking was more important than its duration. A study in the UK, shows that those with chronic bronchitis run a higher risk of developing lung cancer. Cigarette smokers are also more than twice as likely to develop coronary heart disease and three times more likely to develop myocardial infarction than non-smokers. The relation between cigarette smoking and cerebro-vascular disease (stroke) is largely confined to the younger age groups; there is less effect after the age of 65 years. In young people, ischaemic diseases of the legs (Thrombo-angiitis obliterans) appears to be confined almost exclusively to those who smoke.

Besides, the love for lady Nicotine is also associated with some more miseries such as development of cirrhosis of the liver and cancer of lip, oral cavity, pharynx, nose, larynx, trachea, oesophagus, urinary bladder, kidney and pancreas. Incidence of gastroduodenal ulcers has been found twice as high in smokers than in non-smokers. Smoking may increase mortality by delayed healing of ulcer. Smoking may affect expectant mothers by way of retarded foetal growth and increase in the risk of perinatal death.

Besides nicotine, mother tobacco has got another daughter also—isoprenoids and a son—the tar. However, nicotine is better known and more notorious because of its strong pharmacological actions. These actions include (i) vaso-constriction (narrowing of blood vessels), tachycardia (increased heart rate) and elevation of blood pressure, (ii) initial stimulation of salivary and bronchial secretions followed by inhibition, (iii) excitation of respiration, vomiting, anti-diuretic actions, (iv) inhibition of stomach contractions and gastric secretions, delaying the emptying time of the stomach, (v) inhibition of appetite and reduction in body weight by some process over and above the effect on appetite, (vi) increased bowel activity and diarrhoea followed by decreased activity, (vii) release of epinephrine from adrenal medulla and 11-hydroxy-corticosteroids from the adrenal cortex, and (viii) increase in serum free fatty acids and triglycerides. Tar is a well-known carcinogen.

Smoking affects non-smokers, too

Lady Nicotine is revengeful to everybody irrespective of the form in which mother tobacco is smoked be it cigarette, *bidi, hookah, chillum*, cigar or pipe. She pays no heed to the appeal that the individual is only a mild or moderate smoker and not a heavy smoker. All smokers are thus exposed to the potential health hazards inherent in smoking—the severity of effect being merely a question of intensity and duration of smoking. Lady Nicotine not only inflicts vengeance upon smokers but doesn't spare the company also which they keep, although such company may consist of non-smokers only. These non-smokers who inadvertently inhale the smoke generated by their smoker friends come in the category of 'passive smokers', 'involuntary smokers' or 'secondary smokers'. Apart from discomfort, such exposure may cause distress to asthmatics and other susceptible subjects and prejudice the cardiac function of people with coronary heart disease. It may also increase the chances of non-smokers getting leukaemia and a wide variety of cancers.

Despite growing awareness about the health hazards of smoking through various publicity media, statutory warning on cigarette packets, health education campaigns and efforts of voluntary organisations, people particularly young persons, still get lured towards lady Nicotine. Today, in most European countries, more than 50 per cent of males and over 30 per cent of females are smokers. In Asian countries, the rate of smoking varies from 40 per cent to 75 per cent among males. World tobacco production touched a record high of 5.5 million tonnes in 1976. World wide, consumers spend almost 100 billion dollars annually on 4 trillion cigarettes.

In India, studies carried out by various workers reveal a wide regional variation in the proportion of smokers—from 75 per cent of the men in the North and South-East regions to only about 50 per cent in the West. About one third of men have been found to get addicted to smoking before reaching the age of 20 years, even though there is a considerable regional variation. In one study by Babu and Chuttani, the prevalence of smoking among students 12 to 19 years age group) was found to be 8.72 per cent. Similarly, in a study of medical students in U.P. by Sandell *et al*, almost one-third were found to be smokers. There are reasons to believe that during recent years smoking has registered an increase among the student community. Greater attention will have to be paid to curb the menace if we want to attain the goal of 'Health for All by 2000 A.D.'.

Preventive steps

To encourage communities and nations to undertake greater effort to reduce smoking, World Health Organisation announced 'Smoking or Health—the Choice is Yours' as the theme of WHO Day in 1980. It is high time that effective steps are taken to prevent and control this modern scourge the smoking epidemic. These control measures should include besides health education, legislative and restrictive measures, ban on smoking advertisements, warning on cigarette, *bidi* and cigar packets, product modification (production of low tar and low nicotine cigarettes), prevention of tobacco cultivation on commercial scale, increase in tobacco taxation, development of public information and public education programmes and finally the smoking cessation programmes at individual, group and community level. International and voluntary health organizations are doing excellent work in this field and need to be encouraged. Besides the WHO, the other international agencies like UNESCO, UNICEF, FAO, ILO, UNDP etc., are also playing their role in this task. Tobacco Research Council in the UK has done valuable research on smoking problem. Similarly, 'The Vigilance of Action on Smoking and Health (ASH)', a voluntary organization has proved extremely useful in the UK. In the USA, 'The National Clearing House for Smoking and Health' has been of inestimable value to all countries facing this problem. In India, unfortunately, there is no voluntary organization exclusively devoted to this cause. These exists 'The Cigarette (Regulation of Production, Supply and Distribution) Act, 1975' and 'The Cigarette Rules 1976' effective from 1st April 1976 which compel the manufacturers to display the statutory warning, namely 'Cigarette Smoking Is Injurious To Health' on all cartons and packets of cigarettes but a total ban on advertisement on smoking has so far not been imposed.

In spite of the well-known health hazards of smoking, the habit goes on almost unabated. Like drinking, this habit also often starts as a means for mental relaxation under conditions of stress, for masking shyness, to project a particular social image and under the false belief of its beneficial values. Social sanction and social tolerance are the factors which play a significant role in perpetuating this evil. Once it takes firm roots, it becomes difficult to abandon it as it produces many 'withdrawal symptoms' making the person depressed, morosed, sick and out of form.

Health as such is an individual asset. The basic responsibility of guarding this asset against all possible hazards, lies with the individual himself. No one therefore need fall in the trap of lady Nicotine, no matter how much alluring it may seem outwardly. Remember, next time when you strike a match box to light your cigarette, you may be igniting your own funeral pyre. ○

Cigars and pipes are dangerous, too

As few as four cigars or four pipefuls of tobacco give the smoker as much toxic substance as ten cigarettes. Doctors at Minnesota University's School of Public Health, in the USA, advised that even people who have never smoked cigarettes, only a pipe or cigars, should avoid these, too.

SMOKING

TOBACCO SMOKING — ITS BEHAVIOURAL PATTERN AND CONTROL

VINOD KUMAR PANDEY

Despite repeated warnings, smoking is assuming an epidemic form particularly in adolescents and is probably the largest single preventable cause of ill-health the world over. Indeed, smoking is truly "slow motion suicide".

IN India, no country-wide analysis of smoking trend has been carried out so far. However, the findings of an epidemiological study on tobacco smoking conducted by the Indian Council of Medical Research (ICMR) in a rural community in Meerut district of U. P. indicate that the number of smokers increased with age as the prevalence rate among males of 10-14 age group was 17.5 per cent as compared to 90 per cent among those above 15 years of age. In India, the percentage of teenage boys and girls who smoke is 9 and 6 respectively. The habit of smoking among urban youth in India has been increasing fast and poses the biggest threat to young people's health.

Those who smoke *bidi* have a very high risk of pharyngeal cancers of the larynx and the lung and somewhat lower risk for cancers of the oral cavity and oesophagus. Similarly, the habit of cigarette smoking is a risk factor for cancer of the pharynx and of the lung. Numerous epidemiological investigations have linked smoking with insidious ailments such as coronary heart disease, cancer, emphysema, chronic bronchitis and others. Those women who smoke while taking contraceptive pills are more susceptible as compared to non-smokers who are on the pill to the risk of heart diseases, increased foetal and infant mortality.

Statistics indicate upward trend in the incidence of lung cancer in India during the past few years and that the incidence of chronic bronchitis is also alarming. There is no exaggeration if smoking is made responsible for this. It would also be appropriate to mention here that during the past few years tobacco smoking product manufactures have shown a much greater degree of innovation in their sales promotion than health planners. Rough estimates illustrate the fact that more than 80 billion cigarettes are produced annually in India. Besides, a huge amount of Rs. 10 crores is being spent every year by the cigarette manufacturers on advertising and sales promotion of their products, cigarettes being the topmost advertised product. Despite repeated warnings, smoking is assuming an epidemic form, particularly in adolescents, and is probably the largest single preventable cause of ill-health the world over. Indeed, smoking is a "Slow Motion Suicide". Various recommendations have emphasized that it is wiser to check smoking behaviour at the initial stage rather than to break its habit when strongly established. Therefore, illustration of initiation of smoking is very vital.

Behavioural pattern of smoking

The very first question that raises our eyebrows is—why do people smoke even though they know its deadly consequences. The answers from smokers to this question make interesting reading; although most of these do not provide exact information. But, the analysis reveals factors which directly or indirectly motivate people to start smoking. In fact, the initiation of smoking, a highly complex and apparently an age-related behaviour, appears mostly within the context of social interaction and usually occurs in childhood or in adolescence. The matter is largely settled by the age of 20. If a person is still a non-smoker at this age he is not likely to take it up (6).

Peer pressure

Among the major factors of initiation to smoking are social influence or more particularly the imitation of models, such as, friends (peers), family members and media stereotypes. In an intensive participant observation study by Newman (5) reports that peer pressure and conformity to group status norms were perceived by subjects to be major factors in smoking. The influence of peers seems to have come from "best friend relationship" (7). "Company of a few smokers is enough to persuade one to start smoking. One can easily be trapped when offered a cigarette and light it for the sake of company or to be mod" (10).

According to Salber, the need for prestige and status may motivate teenagers, who are not well adjusted to familiar and adult authority, to seek security in the company of their peers and may use a cigarette, which at one and the same time, symbolizes adulthood, superiority, and defiance. Thus, one may start smoking for finding integrity with the friends' group or to save himself from being alienated from it. In short, early adulthood is a time of particular stress and susceptibility and peer group pressure (pressure due to friends) is probably more influential at this time and the teenager who has yet insufficiently developed internal and social restraints, is more likely to engage in impulsive and irrespective behaviour" (1).

Family pattern of smoking

A number of research findings reveal that the family patterns of smoking have considerable effect on the initiation to smoking behaviour as parents can exert direct and forceful influence on their children. "It would be pertinent to point out here that if one of the parents is a smoker, a third of the adult regular smoker started to smoke before they were nine. And, if children have both parents, who are hooked on cigarettes. There is greater probability of childern following suit" (2). In fact, "the attitude and practices of smoking parents could create a general atmosphere of permissiveness in the home and also availability of cigarettes in a home could facilitate the child's first step towards smoking. Children are more susceptible to smoking if their mother is a smoker". It is well-known that a mother has a greater influence and proves to be a more familiar model to emulate so far as her children are concerned than the father or any other male family member. When the father is a smoker, the child is oriented to accept it because this practice has been going on for generations in India. But, not so among the mothers, so far. But the Indian kids are not confronted with their mothers who are smokers. And when the child is faced with a mother who smokes, he is likely to imitate her more frequently and at earlier age than when he tries to imitate a smoking father (2). Similarly, children have a strong tendency to imitate the smoking pattern not only of parents but also of older siblings. Older siblings who do not smoke, exert a slight deterrent effect on the smoking of younger siblings.

Influence of advertisements

The next major factor that motivates people for smoking is glamorous advertisements in leading newspapers and magazines, films and hoardings at public places attracting people, especially youngsters, for smoking. Young boys or even girls, sometimes, identify themselves with the models shown in the glamorous advertisements. They, unfortunately, associate glamorous life, as shown in advertisements, with smoking and then they try to copy them with the hope that smoking will make them mature and sophisticated.

Status symbol

Status symbol, sometimes, also leads a person to smoking. Unfortunately, some of the professionals such as doctors, scientists, philosophers, models, hotel personnel, etc., have been associated with smoking. These professionals are supposed to be smokers to be mod/smart.

Specific personality characteristics

Another vital factor in the initiation of smoking is personality. A number of research studies have pointed out that smokers have a specific personality characteristics which are significantly different from those of non-smokers (12). Hammett asserts that smokers have more difficulty in adjusting to the stresses of life and are chronically stimulated by psychosocial tension; consequently, they turn to smoking for a tension-relieving mechanism. Eysenck maintains, smoking behaviour is due to an extroverted personality i.e., people having extroverted personality are more susceptible to adopt smoking. From various psychological and medical texts it is evident that smokers are anxious, nervous, have weak ego, show more neurotic trend and emotionally unstable. They smoke or inhale more to reduce anxiety and tension or to control innerarousability and they think that smoking causes strong ego development (3).

Sometimes access to smoking situations such as frequency of alcohol drinking, smoking marijuana or working in a place where most of the workers are smokers or where smoking is appropriate, may also motivate any person to start cigarette smoking (4).

Besides these factors, the possibility of biological and genetic predisposition to smoking also cannot be ruled out.

Smoking Control : need of the hour

In the western industrialized countries more emphasis has been given on anti-smoking programmes that has, to some extent, checked this smoking epidemic. This has compelled the tobacco smoking products manufacturers to be more attentive towards their business in developing countries. No doubt, they have got success in opening this new market in developing countries by making cigarette consumption a part of a success image. (10). Now the problem of tobacco smoking is becoming serious, especially in developing countries like India.

Although the deadly consequences of tobacco smoking are well known, yet still in most of the developing countries governments are not showing their enthusiasm in anti-smoking programmes. Foremost reason is that tobacco products help in improving the economy of the country, besides creating jobs. In India, excise revenue from tobacco is around Rs. 7500 million per annum and export-earning are of the level of Rs. 2000 million per annum (8).

But this reason in favour of tobacco smoking products can be reconsidered in terms of human suffering and the social cost of caring for sick smokers.

Besides other practical measures such as health warning on cigarette packets, heavy taxation, ban on smoking at public places, etc., non-smokers must be encouraged in the society. Steps must be taken to promote positive image of non-smokers in society as is planned for improving the health status of the youth by the International Olympic Committee (IOC) and WHO in a joint campaign under the slogan "Winners for Health", which is aimed at the 12-25 years' age-group. The positive image of non-smokers in a society may force the smokers to think "what is wrong with them". To achieve this goal, same advertising methods may be used as are being used by cigarette companies to encourage smoking and incentives may also be provided for youngsters not to initiate smoking (13).

As is evident through a number of researches that vulnerability to peer pressure and higher level of conformity in adolescents may lead them towards smoking for the sake of group acceptance. Hence, as suggested in an article published in the Health Education Journal (12) "Adolescents need to be equipped with skills that will permit them to express themselves and follow their own conviction (remain non-smoker) yet not alienate themselves from their peer group". For achieving success in this regard, pre-adolescents must be provided proper information and health education through school curriculum, mass media and magazines, etc.

To cope with glamorous advertisement, any connection between success, sexuality and status; and cigarette smoking should be banned in advertising. Because sales of tobacco products cannot be stopped but it is suggested that sales promotion of tobacco products should be prohibited. Not only cigarette advertisement but various sporting and cultural activities either sponsored or arranged by tobacco smoking product manufacturers should be banned. Leading sportsmen, film actors/actresses and VIPs should be appealed not to lend their name and popularity in the promotion of cigarette selling. The caption printed on cigarette packets and in advertisements must be printed in big and attractive manner in the middle of the packet in advertisements. Besides, cigarette companies should carry tougher and more specific health warnings on their packages and advertisements mentioning smokers are more prone to lung cancer, heart disease, etc. Side by side, as a precautionary measure to prevent pre-adolescent group from smoking, selling of cigarettes to youngsters must be prohibited under a specified age and it should be strictly enforced. At the same time, antismoking campaigns should also be organized by schools, youth clubs, youth voluntary organizations, etc. And finally, parents are also advised that if they want to keep their children away from this growing epidemic they should decrease their smoking habits and should never smoke in the presence of their children.

How to Quit smoking

The decision to quit smoking is personal one. What is important to quit this deleterious habit is to have "strong will-power". However, smokers can be advised to follow some suggestions given by the National Cancer Institute, Washington. "Before you quit, try smoking a lot more than usual, so the experience becomes distasteful. Then collect every cigarette but you can find and put them all in a large glass container to serve as a reminder. Remember, never think about going without a cigarette for the rest of your life, concentrate on one day, one at a time.

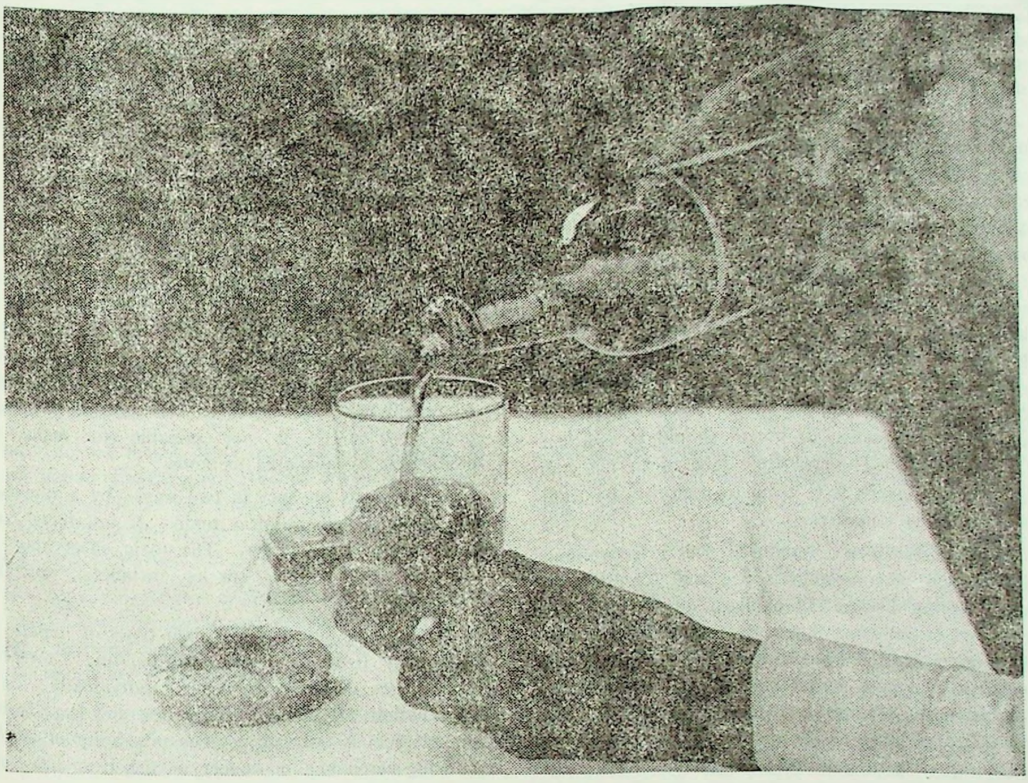
If you try to quit, at least during the first few days, spend as much time as possible in places where smoking is prohibited such as theatres, etc.

Drink water or fruit juice, but avoid coffee, alcohol and other foods people usually associate with smoking. If you miss putting something in your mouth, try chewing-gum," the Institute suggested.

One more hint to smokers who want to quit smoking is "Do not keep matchbox with you". It will help reducing the rate of smoking due to non-availability of matchbox easily.

References

1. Ahuja, Ram : "Sociology of the youth sub culture", Rawat Publications, Jaipur, 1982.
2. Chatterjee Shoma, A. : "Why does a woman smok ?" Beauty, 15 Sep. 1985, 5—6.
3. Chatterjee, R. G. : Indian Science Congress Association, Calcutta 1981.
4. Curt Mettlin : Journal of Health and Social Behaviour, 14 (June,) 1973, 144.
5. Newman, J. M. : Journal of School Health, 40, 1970, 28—31.
6. Smoking or Health : A Report of the Royal College of Physician, London.
7. Smoking and Health : Surgeon General Report, U. S. A.
8. Smoking and Health : SEARO, Tech. Pub. No 7, WHO, New Delhi, 1985.
9. Soni, S. C. : "What tempts you smoke". The Hindustan Times, Dec. 30, 1985, 24.
10. Smoking Control : Warning from the West : Heart News, Vol. XXIII, No. 3, March, 1986.
11. Tucker, Larry, A. : The Journal of School Health, April, Vol. 55, No. 4, 1985, 127.
12. The Health Education Journal : Vol. 39, No. 3, 1980, 80—83.
13. WHO Chronicle : 39(3), 1985, 104—106.
14. World smoking and Health : Vol. 3, No. 3, 1978, 41—46.



ALCOHOL

ALCOHOLISM AND LIVER

DR V. BALAKRISHNAN

ALCOHOLISM is a worldwide social and medical problem. It has been the subject of intensive studies. Alcoholic drinks have been used since the dawn of civilisation. At one time or another they were considered cures for practically all diseases. Evidence for this abounds in our ancient scriptures and classic treatises on Indian Medicine. However, now their social value is far greater than their therapeutic uses. Its excessive consumption results in serious medical, psychological and sociological problems.

ETHYL alcohol, or ethanol, is the active ingredient in the common alcoholic drinks like beer, wine, toddy, whisky, gin, brandy, arrack, vodka etc. The content of alcohol may vary from as little as 5--6 per cent in beer to 50—60 per cent in vodka.

Alcohol is absorbed by both the stomach and the small intestine. Its presence can be detected in blood within five minutes after ingestion. Maximum concentration is reached in 30 to 90 minutes. Intake of milk and fatty foods impedes and water facilitates absorption of alcohol. It is eliminated chiefly by oxidation in the body and to small extent excreted unchanged in the urine, sweat and breath. It is a source of energy supplying seven colories per gram, without any essential nutrient or vitamin content. Persons with alcohol concentration of alcohol in the blood above 50 mg per 100 ml, or equivalent concentration in urine, saliva or breath should be considered 'intoxicated'. This principle is used in the common breath analysis tests given to motorists by traffic police in many countries.

'Drunkenness' is so common that is psychologic and physical manifestations are well known. It causes varying degrees of exhilaration and excitement, loss of self-control, erratic behaviour, excessive talkativeness, slurred speech, loss of coordination of movement and gait, irritability, drowsiness, and in advanced cases, stupor and coma. On the other hand, "alcoholism" may be defined as both a chronic disease and a behavioural disorder, characterised in either context, by drinking alcohol surpassing social drinking customs and interferring with the drinker's health, interpersonal relations, or means of livelihood. Reduced to pharmacologic terms, it is addition to alcohol.

The extent of the problem is difficult to assess. Alcoholics rarely admit their dependence. In statistics published in 1971 in U.S.A. there were about seven per cent of the adult population in that country who had "behaviour of alcohol abuse and alcoholism". Figures for our country are not available. There is reason to believe that a significant percentage of our population are habitual drinkers and that the percentage is increasing. Alcohol abuse is widespread in all levels of society. It is not confined to a privileged few.

Ill-effects of alcohol

Although alcohol may alter the function of practically every organ system in the body, the important clinical effects are on the digestive organs, the nervous system and the heart. Excessive alcohol intake may set in psychological disturbances, a variety of neurological disorders and cardiac effects and many effects on the digestive organs like gastritis, pancreatitis, malabsorption and harmful effects on the liver.

Cirrhosis of Liver

Epidemiologic statistical data shows that anybody drinking an amount of alcohol between 60 to 80 gms per day for a given period of time is at risk to develop cirrhosis of the liver. This risk is considerably greater and almost a certainty if consumption exceeds 160 gms per day which is equivalent to about 2/3s of a bottle of whisky. To define a safe amount of alcohol intake is difficult. It varies from person to person. About 30 per cent of proven alcoholics develop cirrhosis of liver. It is not possible to make any predictions by available methods.

Alcohol acts on liver in two ways—by a metabolic alteration or as a topical toxin. It interferes with vital metabolic pathways. The toxic effect may be made by ethanol itself, or its metabolic, acetaldehyde.

Alcohol can induce three main types of hepatic injury—fatty liver, alcoholic hepatitis, and cirrhosis. These three diseases can occur individually or in combination. By far the commonest and least serious among them is fatty liver. The possibility of alcohol inducing carcinoma or cancer of the liver has also been recognised in recent years.

Fatty liver: Fatty liver is universally common in chronic alcoholics. It produces a smooth enlargement of the liver with minimal functional alterations. Microscopical accumulation of fat droplets can be seen inside and outside the liver cell. The condition may remain as such or may lead to serious alcoholic hepatitis or cirrhosis. Fatty liver is essentially a reversible process and varies with the amount and duration of drinking.

Alcoholic hepatitis: Alcoholic hepatitis or inflammation of liver is more serious and usually follows years of hard drinking. It is often precipitated by a bout of alcoholic excess and hearlds the onset of cirrhosis if the patient continues to drink. This condition often becomes acute with fever, collection of fluid in the abdomen and jaundice. Patients suffer loss of appetite, weakness and a large tender liver.

(*Contd.* on page 214)

ALCOHOL

Side-effects of Heavy Drinking

Alcohol-related accidents account for a significant proportion of deaths, especially among young people in many countries.

Analyzing the health problems caused by alcohol, a World Health Organization (WHO) study says accidents at work, in the home and during sporting events are more frequently related to alcohol consumption than is widely recognized.

"Not only the alcohol dependence syndrome itself but many disabling and sometimes fatal and psychological conditions can be attributed either wholly or in part to excessive drinking".

The Geneva-based world body says that excessive drinking disrupts family life and can also result in violence and neglect.

It expresses concern over the consumption of alcohol by preventing women as it "can damage the unborn child".

"It is clear that the vulnerable group includes many more people than just the heavy drinkers".

The study says that in some developing countries which do not have long traditions of consuming commercially produced beverages of the variety and strength available in most developing countries, alcohol-related problems may be specially serious among technicians and professionals "who are the scarcest resource or young people who represent the country's investment in future."

It says that the total production of alcohol rose by almost 50 per cent between 1965 and 1966 while production per person increased by just under 15 per cent over the same period. Two-thirds of the world's alcohol production in both years was in Europe and North America.

"The fact that these are the very regions of the world where population growth rate was least rapid is an indication of the growing importance of international trade in alcoholic beverages", it adds.

The study notes that liquor consumption has been rising steadily in the Third World countries, most of which important alcohol from industrialized countries. However, policies have yet to be implemented to counter this threat in the Third World countries—

The growth in consumption of alcohol beverages in some developing countries has been much more rapid than in others, and if this trend continues for another generation, they will attain or exceed the present levels of per capita consumption in the developed countries".

The study says the rapid growth of alcoholic consumption in developing countries is likely to be followed by a higher incidence of alcohol-related problems after some time.

"These additional problems will represent a very substantial drain on scarce economic and social resources".

It notes that in developing countries, young men living in urban areas are often the first to adopt the practice of heavy drinking.

"The availability of alcoholic beverages is likely to continue to increase and spread around the world bringing concomitant increases in alcohol-related health problems and associated social costs". ❁

Courtesy: *Indian Red Cross Journal*

(*Contd. from page 212*)

The liver invariably shows inflammatory changes. The diagnosis of alcoholic hepatitis should be a warning to abstain from alcohol forthwith.

Cirrhosis of liver: A most dreaded and common complication of chronic alcoholism is cirrhosis of the liver. Alcohol is only one major cause of cirrhosis, the other being infection by the hepatitis virus. Only about 23 to 30 per cent of chronic alcoholics develop cirrhosis. Factors determining this vering vulnerability are poorly understood. There are some suggestions of hereditary vulnerability which awaits confirmation.

Cirrhosis is the term applied to a destruction of liver cells which may be gradual or rapid with replacement of the dead or destroyed cells by inactive fibrous tissue. Thus, the functioning liver cell mass progressively shrinks and becomes inadequate to handle the vital functions of the body. When the destructive process and the reparative process balance each other cirrhosis is said to be "compensated" and may go on for years. If the destructive process overtakes the reparative process which is the usual case—decompensation sets in and liver failure follows. This is indicated by loss of appetite, jaundice, weakness and wasting, distension of abdomen with fluid, swelling of legs and drowsiness. Vomiting blood, passage of dark, tarry stools, coma etc. are later complications. Decompensated cirrhosis is a progressive condition, resulting in death within a few years' time. While established cirrhosis cannot be cured, there are many methods of treatment which can give symptomatic relief and alleviate suffering.

ALCOHOLISM IS A DISEASE
— ARREST IT

While it can be said that good nutrition may prolong survival in alcoholics, it is generally recognised now that the harmful effects of alochol on the liver are not due to associated malnutrition. There is no evidence that a good diet protects the liver against alcohol. Same can be said of fancy drugs which claim to protest liver from alcohol.

It is important to realise that complete abstinence from alcohol can reverse early changes in the liver. Careful studies have shown that even in established cirrhosis, where a cure is beyond hope, life expectancy can be prolonged if the person abstains from further drinking.

Alcoholics anonymous

Following the treatment of the medical complications, the underlying problem of alcohol dependence has to be treated. This will be easier if undertaken with the cooperation of victim. A number of methods have proved valuable in the long term management. The most important of these are the use of drugs like Antabuse, averision treatment, psychotherapy, and participation in social organisations for combating alcoholism. Alcoholics Anonymous (AA), an informal fellowship of former alcoholics, has proved to be the single most effective force in the rehabilitation of alcoholic patients in the west.

Alcoholism is not merely a medical problem. It is a psycho-sociological problem as well, a by-product of our culture which has eaten into its own fabric of social and moral values. Tackling this problem effectively should be a test of our ability and commitment to save our culture from its own clutches.

The smallpox of the 1980s

In light of the fact that some 1000 persons [in the USA] die each day from cigarette smoking, the apparent preoccupation in the United States with nitrates, saccharin, and other food additives will baffle historians 100 years from now. Cigarette smoking claims more lives in three years than all United States wars combined. If the same number of persons died from anthrax or smallpox, society would protest and demand immediate, effective action. Yet the toll exacted by the cigarette smoking epidemic is concealed behind death certificates which read : heart attack, stroke, cancer. Cigarette smoking is the smallpox of the 1980s in the developed world, and society will be judged quite harshly in the future for not having dealt with this fact in a straightforward manner.

From : FOEGE, W. Epidemiology in the experience of the United States Centres for Disease Control—a personal view. *Epidemiological bulletin*, 5 (5): 8 (1984).

DRUGS

MEETING THE THREAT OF DRUG ABUSE

MARCUS GRANT

A preventive strategy begins from an awareness of the multiplicity of factors involved in narcotic and psychotropic drug abuse. Importance of educational strategies should not be forgotten. Much health education has in the past been directed exclusively at young people, Although they remain an important group, others, such as parents and community leader s must not be left out of the programme.

IN March of this year, representatives from 30 countries met at Lancaster House, London, for a conference of Ministers of Health on narcotic and psychotropic drug misuse. This conference provided a unique opportunity for the collective views of these governments to be brought to the attention of the world community. Their joint statement will be put before the 1987 UN Conference on Drug Abuse.

The misuse of narcotic and psychotropic drugs leads to many other kinds of problem as well, but the focus of the London conference was specifically on health problems and on the action that health ministries can take to counter this threat.

Action to reduce health problems arising from narcotic and phychotropic drug misuse still has to face powerful political and economic interests that are opposed to effective programmes. This is true at both national and international levels. Within and between countries, there are forces at work that seek to undermine efforts to develop a comprehensive response to the health problems related to drug misuse. The challenge to the health sector is to dispel uncertainty about preventive and curative action and to mobilise the will of ordinary people to join in the efforts to control drug-related problems.

Unfortunately, both nationally and internationally, the information available on the nature and extent of drug abuse problems is far from adequate. Although the general upward trend is clear, estimates of production and consumption are uncertain and information on the prevalence of particular problems, including dependence, is very hard to obtain. There are many reasons for this, some of which relate to the illegal nature of the substances.

A preventive strategy begins from an awareness of the multiplicity of factors involved in narcotic and psychotropic drug misuse. Efforts in recent years to reduce the supply of drugs through control mechanisms have not been sufficient to deal with the rising demand. As the emphasis shifts towards giving higher priority to strategies aimed at reducing demand, the health sector must expect to play a more and more central role in developing national and international responses.

Reducing demand will call for much more than health education, although the importance of educational strategies should not be forgotten. Much health education has in the past been directed exclusively at young people. Although they remain an important group, others, such as parents and community leaders, must not be left out of the programme.

It will also be important to change the practice of health professionals, and this will include training medical practitioners in better prescribing practices and appropriate legal measures. The development of activities at the community level, mo-

bilising the will of the people to take action to counter the threat of drug abuse, will geatly strengthen a national programme of prevention. Community development is based on knowledge of the community and its problems; individuals need to be identified within the community who will work closely with the health sector. A programme of education and prevention should therefore involve the active participation of community leaders in its design, delivery and evaluation.

On one level, a national policy on narcotic and psychotropic drugs cannot be separated from the overall national policy on health, but equally a national drugs policy will involve the essential collaboration of many other sectors of government. For each country, the process of defining a national drugs policy will require a balance between concerns for mental health, for wider health issues, and for overall national development.

A national policy, once formulated, must be kept under review. Within the framework of the policy, a national plan of action can be developed that leads to specific programme steps in prevention, treatment, research and training. But this occurs within a changing political and economic climate. As circumstances change, so must some aspects of the national programme. What remains constant is the commitment to long-term action and the recognition that the solution to drug misuse problems lies in prolonged effort rather than in unplanned or uncoordinated initiatives, however sensational some of those may be. Planning national programmes means planning for action by many people working in harmony.

THE MORES OF MORE

In societies consumed with the many "mores" of materialism — "more wealth, more food, more drink, more cars, more tobacco, more sex" — "it is not surprising if the 'more' includes more narcotic and psychotrophic drugs," Dr Halfdan Mahler, WHO's Director - General told health ministers from 30 countries at a meeting in London.

"If our social values makes drug-taking an acceptable norm among peer groups of youngsters, then it is these values that need to be reconsidered," he suggested as a step to counter the virtually unchecked problem of drug abuse.

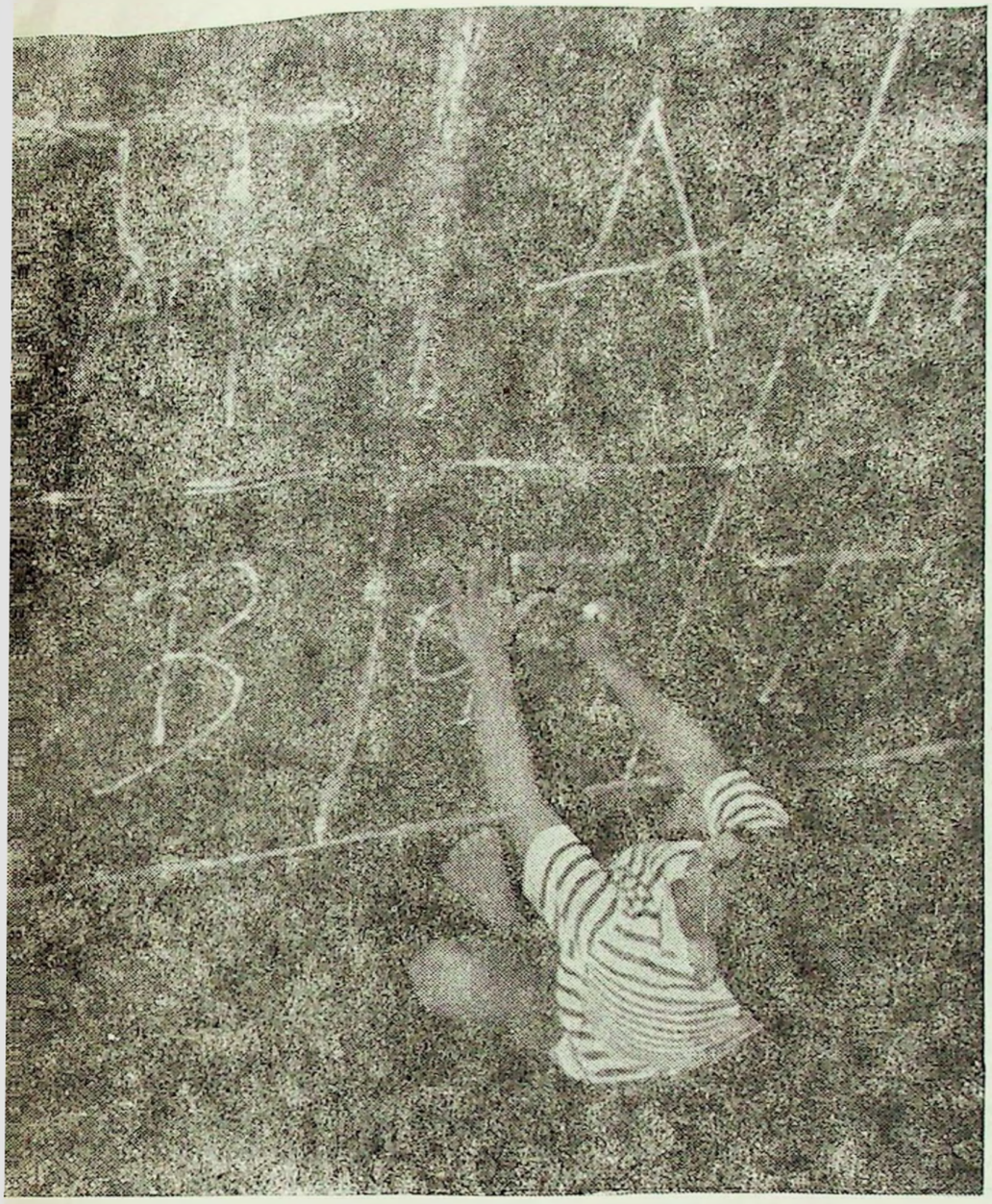
"So perhaps it is not the youngsters we have to change, perhaps it is some of our social values," he added.

Figures presented to participants shows there are an estimated 750,000 persons world-wide addicted to heroin, 1.7 million to opium, 4.8 million to cocaine, and 29 million to cannabis.

Opportunities for international collaboration are most likely to develop out of national policies on narcotic and psychotropic drug misuse. Thus, technical cooperation between developing countries can, for example, include already existing programmes to control drug misuse problems in each of the countries involved. Equally, linkages between developing and developed countries are likely to grow in strength as the advantages of effective cooperation become apparent. Producing countries and consuming countries may view drug misuse problems from somewhat different perspectives, but they are likely to be united in their concern to minimise their adverse health consequences.

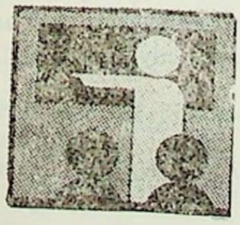
Despite social, cultural, economic and political differences, countries can learn from each other's failures as well as from each other's successes. All too often, experiments are repeated that are known by others to have been unproductive. A fuller and more open exchange of all types of experience at community and national level can lead to a better international response.

Not only WHO but also other United Nations agencies certainly need to increase their current level of activities. Just as a commitment to action is essential to make national programmes effective, so too is that commitment important for international efforts. The international agencies have the technical capacity and the will to take action. By co-sponsoring the conference in London and by taking responsibility for its scientific preparation, WHO has demonstrated its willingness to intensify its own efforts. In following up the recommendations of the conference, WHO and the participating countries will be working together to meet the major threat to the world's health that is being created by the misuse of narcotic and psychotropic drugs.—*Courtesy*: World Health, June 1986.



Literacy and Well-being

The map of illiteracy coincides closely with the maps of poverty, malnutrition, ill-health, It follows that literacy must form part of the strategy for achieving Health for all

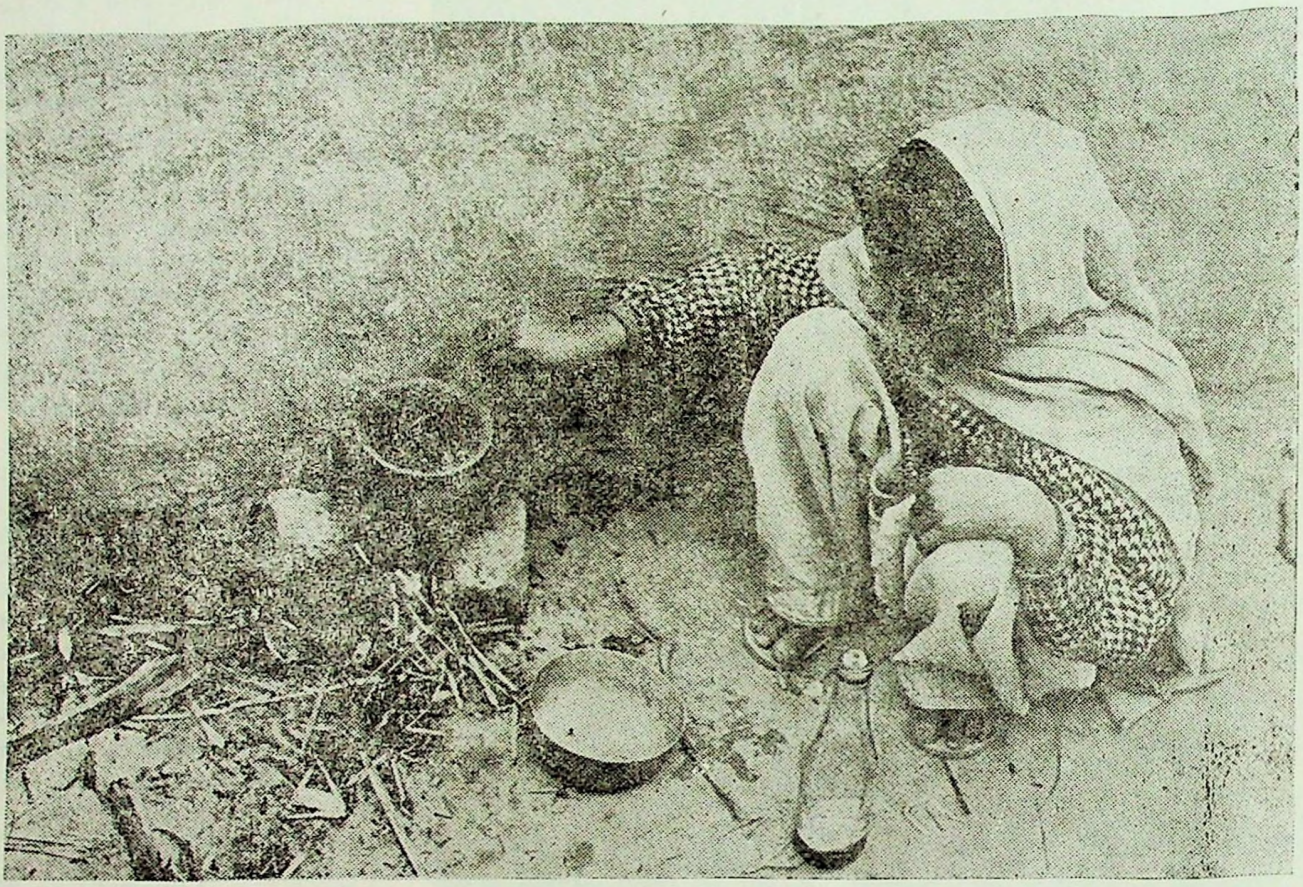


The basic statistics on illiteracy are well known, and certainly provide abundant reason to reflect upon the inequalities of our world. By the most recent estimate there are 824 million illiterates of 15 years of age and above, over 800 million of whom live in the developing nations. While carefully compiled and calculated these estimates have to be taken with a certain caution. First, while literacy is measured as a dichotomous variable, it is in fact a continuous one. It may not be possible to be a little bit pregnant, but it is certainly possible to be a little bit literate. Hence, the statistics depend upon where you draw the dividing line. UNESCO has its own definition: a person is literate "who can with understanding both read and write a short simple statement on his everyday life."

Definitions

Recognising that this included some who were not sufficiently literate to cope with the complexities of an industrial society, a committee of experts developed a second definition for functional literacy: to be functionally literate, an individual must be able to "engage in all those activities in which literacy is required for effective functioning of his group and community..." and also be able "...to continue to use reading, writing and calculation for his own and the country's development". As will be observed, the second definition is a relative measure. The criterion is the capacity to cope with the challenges and exigencies posed by the nature of the society in which one resides. So even the concepts of literacy are slippery.

Only hard work will of course change the literacy situation, but the statistics are mere numbers on paper or in a computer. It is noted that those who come to power in revolutions often count illiterates differently from their predecessors.



The illiterate is not only unable to read and write but he — or more usually she — is poor, hungry, vulnerable to illness and uncertain that even his or her present miserable circumstances will not decline to the point where life itself becomes the issue.

But whether there are 824 million or 1000 million illiterates, there are clearly too many of them.

What does illiteracy mean to the illiterate? Let us note here that the map of illiteracy closely coincides with the maps of poverty, malnutrition, ill-health, infant mortality, etc. Hence, in the typical case, the illiterate is not only unable to read and write but he—or more usually she—is poor, hungry, vulnerable to illness, and uncertain that even his or her present miserable circumstances will not decline to the point where life itself becomes the issue. In these circumstances, does his or her literacy really matter? Would he or she even list illiteracy among life's major problems? While man does not live by bread alone, we can assume that the hunger of the body will normally take precedence over the hunger of the mind, particularly if the intellectual diet available to the new literate is as poor as is normally the case.

It follows that the best argument for doing something about illiteracy is not that it is part of the immense problem of inequality in our world, but that literacy can be part of the answer to remedying it. ○

From : Eleven issues in literacy for the 1990s, *by Arther Gillette and John Ryan Assignment Children (UNICEF), 63/64, 1983.*

CARE OF THE AGED

FITNESS AFTER RETIREMENT

COL K. K. VADHERA (RETD.)

A long term policy should be formed by each society, comprising physical, psychological and social dimensions for retired persons. A retired person is simply the end result of an active working life. The goal should be to make this life-span more meaningful for every individual.

RETIREMENT is an immensely important, complex, urgent and inevitable problem as it means accepting several personal losses, i.e., prestige, status, monetary loss and loss in social acceptance. Though the precise time of retirement is always known, but at most of the times, it appears abrupt due to lack of anticipatory preparation. Too many individuals are caught by surprise as they are still in economically good working condition.

Problems of retirement

Physical, mental and social factors determine health after retirement.

(a) The physical health will depend upon various stresses and strains that have happened in life during service. It is, therefore, very essential that one should be fit at the time of retirement. As age advances and as old age is a lamentable inevitability, diseases of respiratory, cardiovascular, urinary, locomotor systems, diabetes, cancer, etc., can affect the individual.

(b) Family relationship might be altered especially if the retired couple have to go and live with their grown up married children.

(c) Retirement may lead to intense marital tensions. Most frequently, the emotional stress is greater on the wife. For many years, she is used to have certain "comforts" in life due to various 'perks' in service. More important than that is that she was used to have a few hours of peace and quietness during the day when the husband was away to work. Now this restless bored man who does not know what to do with himself is around the house all the time and consequently frictions due to constant interference in household affairs can arise.

(d) General dissatisfaction may arise due to lack of social participation and changing socio-economic conditions and deteriorating level of health.

Preventive aspect of problems of retirement

Success in retirement requires a degree of emotional maturity, a realistic comprehension of wants and desires, foresight and acceptance of reality.

Action is required to be taken regarding preserving, the continuity of lifestyles, i.e., services catering to basic and vital needs, viz., housing, health information and work opportunities.

(a) *Housing*: It is a common knowledge that old people want to live in their own houses, in a familiar neighbourhood and in close contact with their relatives and friends. Planning for such a residential accommodation has to be done during service through various governmental and private house building organisations.

(b) *Social integration*: Retired people may feel loneliness and may get socially isolated and may have very little communications and contacts. It is very important that one should maintain social activities and interests at the same level as before. Social participation and activities inside the family as well as joining clubs, associations, religious and political organisations should be actively considered.

(c) *Employment*: To make retirement successful, some form of substitution for the previous work is necessary. It may provide prestige, position, acquisition of power and would also keep the person active.

Work may also satisfy the hunger for a sense of real worth in carrying responsibility or a service to the community. As such the pre-retirement development of a vocational interest is of immense value.

A long term policy requires to be chalked out in each society for gainful employment of retired persons. This is quite essential in view of the fact that high level of unemployment in the world may cause increased tensions between young and old when both of them are in economically good working conditions.

(d) *Healthy and functional ability*: Activity and involvement alongwith ability to pick and choose and go at one's own deminishing pace are the cornerstones of good retirement. With the adoption of preventive measures, the life expectancy has already risen considerably, we can reasonably aim to further extent the span of life to 85 or 90 years with few people dying of disease before the age of 70.

Scope for prevention

We have got sufficiently precise information on the significance of any given factor in the development of a particular pathological process and therefore the modification of lifestyle offers opportunities in preventing such diseases.

(a) *Smoking*: The avoidance of tobacco smoking will not only reduce the mortality from cancers by about a third (cancer of mouth, throat, lungs, etc.) but also reduce mortality from myocardial infarction by about a quarter. It would also eliminate chronic obstructive lung disease and the complication of peripheral vascular diseases.

(b) *Diet*: Diet consisting of wholegrain cereals, vegetables, fruits, limited fats, very few dairy products and eggs, little refined sugar, fish and poultry for animal proteins and sufficiently restricted in amount so as not to cause obesity should be taken with preference to take vegetable oils. Such a type of diet helps in avoiding cancer, coronary heart diseases, hypertension, diabetes, diverticulitis, duodenal ulcer, constipation, etc.

(c) *Alcohol*: It is wise to reduce the consumption of alcohol to as little as possible, if one takes it at all. Many disabling and some fatal physical and psychological conditions can be attributed to excessive alcohol intake.

(d) *Physical Activity*: Physical activity helps in controlling obesity, high blood pressure, blood lipids and insulin activity. Brisk walking, gardening, swimming, golf, fishing are all good for health.

Regular exercise should be a part of retirement activity.

(e) *Other* preventive measures to be adopted are protection against trauma and control of infections.

Adaptation to and training for retirement are important issues to prevent health problems associated with retirement. It requires an activity whose purpose is greater than that of mere survival. It requires co-operation of the family, community and the State. A long term policy should be formed by each society, comprising physical, psychological and social dimensions for retired persons. A retired person is simply the end result of an active working life. The goal should be to make this life-span more meaningful for every individual. ○

AGEING AND ROLE OF HORMONES

DR VINOD KUMAR

Ageing still remains an intriguing issue before the scientists. Hormones play an important role in process of ageing. Their imbalance leads to a number of diseases in the adults, especially among the elderly. In this article the author higlights the role of hormones in the process of ageing and old-age diseases. He says the best way to overcome these diseases is to follow the time-honoured values like balanced diet and avoiding sedentary habits, smoking and drinking.

THERE IS A GREAT CONCERN for the care of elderly people in several developed nations and a number of programmes are available there to meet their multi-faceted problems in health, psycho-social and economic spheres. In medical field, the concerned discipline known as Geriatric Medicine is a part of educational syllabus in most of the medical institutions where doctors are imparted the necessary training. Simultaneously, researchers have taken up the challenge of investigating ageing and its mechanism in their laboratories. Consequently a sizeable portion of health budget is utilized for the welfare of the aged people. Proportion of population over 60 years of age is on the increase everywhere. In advanced countries, they will grow from current 17 per cent to 22 per cent in the year 2025 AD. In our country, presently around 40 million Indians (6 per cent of the population) are above 60 years of age and this figure will increase to 13 per cent by 2025. In absolute numbers, they are going to become 4 times in next 40 years and India will continue to have second biggest population of old people.

Process of becoming old has attracted man's attention since time immemorial. Technological advances have helped scientists to study the mechanism of ageing and based on their findings attempts have been made to prolong the period of physiological competence and delay ageing.

Several theories have been enunciated to explain why we age. For instance, biological theory of ageing which stresses the importance of genetic or environmental factors as responsible for ageing, has held the ground for long. In this article I would be dealing with the *science of hormones* in relation to ageing and their disorders in elderly people.

Role of Hormones.

Hormones are important substances that are formed by certain parts of human body known as the endocrine or ductless glands. They are essential for sustaining life because they are responsible for our growth, development, metabolism, reproduction and behaviour and are necessary for coordinating the activities of various organs in the body.

Brain is the vital organ that controls hormone production by various glands. More precisely, a structure called *hypotholanus*, situated in the brain, is the master of hormone orchestra. It secretes and sends out chemical substances called '*release hormones*' to its assistant situated at a slightly lower level in the brain, known as *pituitary gland*. This gland in turn produces a number of hormones grouped under the *trophic hormones*, each of which controlling a specific hormone producing ductless gland situated at the periphery in our body. These peripheral glands virtually act as slaves to their master hypothalamus and assistant pituitary pair and secrete hormones under their instructions. These glands are: thyroid, adrenal, testes and ovary; secreting their respective hormones. In addition, growth of our bones and muscles, milk secretion from the breast and insulin secretion from our pancreas are also partly totally dependent on this

system. These hormones are capable of exerting their specific actions for fulfilling the various functions either gradually (e.g., growth promoting action) or in response to sudden demands arising either from inside the body or from external environment. The system is set in such a way that even a slight excess of hormone of a peripheral gland can put an immediate stop to its whipping by its master in the backward direction. Thus in health, the peripheral gland acts as an intelligent servant and knows when to obey and when to even guide its master. Hormone production is, therefore, a well regulated and controlled process.

Theory of ageing

The theory of ageing that incriminates hormones propounds that the functional capacity of hypothalamus to direct hormone production is like an ageing clock which is so programmed as to determine the sequence of events right from the time of fertilisation. In other words, this hormonal capacity proceeds in regulated steps like a pace-maker to determine our progress from childhood through adulthood, middle age and finally to old age. One of the hallmarks of our entire life time's hormone regulation is reproductive decline that occurs in women around the age of 45 resulting in stoppage of menstruation, called *menopause,* and a similar decline that occurs in ageing men (but more gradually and less severely than women). At least in females, deficiency of sex hormones that results in this event is clearly favourable to ageing in the form of increased risk of degenerative heart disease and cancer.

Another explanation to account for hormonal changes in senescence is the breakdown of brain's regulatory centres that normally control hormone production. Yet another explanation is the increasing deficiency of brain's neurotransmitters and hypothalamic release of hormones, resulting in altered catecholamine metabolism and deficiency of pituitary hormones, both of which then causing secondary ageing changes. Whatever the hormonal explanation may be the fact remains that ageing is attained by gradual but significant decline in the secretary reserve of thyroid adrenal cortex, testes, ovary and growth hormones. Sex-related trophic hormones of pituitary. however, show a secondary rise due to depressed hormones of testes and ovary. Opinions on status of prolactic secretion with ageing seems contradictory and divided.

Before we now turn our attention to a brief discussion of hormone-related diseases that occur in elderly persons. it will be pertinent on my part not to create an impression that ageing is all due to hormonal deficiencies. This is not so. There are other factors too contributing to this phenomenon. Disabilities and diseases acquired during life also have their role in ageing process. Further, other systems of human body are also undergoing senescence changes.

Hormone-related diseases

With the background knowledge of hormones already illustrated, let us now turn our attention to some common hormonal diseases, some of which can be seen in adults also but may present unusual features in the elderly. Moreover, some diseases may be unique to advancing age :

1. Male Sexual Disorders in ageing individuals are usually slow to develop and may take on the form of declining sexual performance and gradual decrease in fertility potential. There are only uncommon examples of children born to men above the age of 65 to 70 years. Reasons for declining sexual performance in elderly males are not, however, entirely hormonal because basal concentration of their sex hormone (or the testosterone) level may be normal. Psychogenic overlay, weakness of local nerves and general fatigue appear to be equally important and need to be adequately looked after.

2. In the females, reproductive decline occurs around 45 years of age and rather more rapidly to a point of virtual cessation when compared to males. This manifests as menopause in the middle aged woman, sometimes accompanied by upsetting symptoms of hot flushes, sweating and palpitation which can be wrongly interpreted as due to neurosis. Replacement of the missing female sex hormone (or the oestrogen) appears plausible but it is usually not resorted to by doctors due to serious side effects and complications. There are some specific ways of treating this. Another effect of oestrogen deficiency in females is the gradual bone loss called osteoporosis in which ageing process by itself and poor nutrition may also be contributing factors. Only in advanced cases do the patients develop significant bone pains and compression fractures.

3. Thyroid dysfunction is of special importance because certain characteristics of thyroid deficiency are also the features of old age such as sluggishness, dry skin, cold intolerance and accelerated fat deposits in their blood vessels. Laboratory tests in ageing ordinarily do not show florid changes in thyroid hormone's

concentration except some compromise in their secretory reserve. If an elderly person gets into an actual hypothyroid state, usually the dose of thyroid hormon required by him is about 30 per cent lower. With regard to hyperthyroidism, it is perhaps less common in elderly but when it does occur, the effects are a typical and demand special diagnostic expertise. There is some evidence also in favour of hyperthyroidism as a factor that promotes ageing.

4. Disorders of adrenal gland are not specially common in elderly people. However, the apparent importance is the impression created that because our elderly people are not as able as young are to adjust to stresses and tensions they may have the deficiency of adrenal hormones which have a special role to play in combating stresses. Hypothalamo-pituitary-adrenal is a life support axis and can influence certain behavioural functions and also take active part in our interaction with external environment. Only marginal alterations in the secretion pattern of these hormones have been reported with ageing. However, a hormone called *norepinephrin* which comes from the inner part of adrenal gland is increasingly being attributed to certain features of ageing.

5. Disorders of behaviour, sleep and depression : New exciting areas of research have shown hormonal basis to abnormal sleep patterns and wakefulness in elderly persons. A high level of night time norepinephrin is often incriminated in certain sleep disturbances. Then these disorders have been shown in isolated reports to have abnormality of certain other hormones like prolactin, cortison, etc., but their exact significance is unknown.

6. Glucose intolerance and diabetes mellitus : One of the hallmarks of advancing age is an inability to tolerate a load of glucose ingestion, an abnormality also seen in the common variety of diabetes. For this and other reasons, diabetes even if occurring at earlier ages is sometimes considered to be a process of accelerated cell ageing. In any case, this inability to utilise glucose biochemically in the body is associated with degenenerative changes in heart and arteries which are some of the indices of ageing. Diabetes being a common disease needs few lines of discussion. Essentially it is considered to be due to deficiency or inaction of a hormone called *insulin* secreted by a gland called *pancreas*. Presuming that diabetes is at least partly a reflection of premature ageing, we have certain dietary and pharmacological manipulations available that can control diabetes and possibly delay ageing.

7. Hormone related Cancers : We will briefly mention here the role of hormones in respect of cancers of prostate, uterus, ovary and the breast.

8. Bone loss due to ageing.

9. Loss of water and salt balance in the elderly.

What's to be done

Much has been said about the causation of ageing and role of hormones in certain diseases of geriatric practice. Perhaps, while making generalisations, one could stress the importance of time-honoured values such as intake of balanced diet, avoiding sedentary habits, smoking and liquor. These are at least some established factors which contribute to keeping you fit and healthy for a longer time, which is the ultimate aim of entire human race. Scientists will have to work with public educationists. We can now only extend the intricate scientific explanations for relatively simple but valuable habits practised for centuries. Nevertheless, scientists are at work at a much more fundamental level to identify means to delay ageing, e.g., repairing the ageing clock, etc. (*Courtesy*: All India Institute of Medical Sciences). ○

DESIGNER DRUGS

The annual report of the International Narcotics Control Board in Vienna has warned against what are called "designer drugs" — a reference to a new group of drugs now finding its way to the world's big cities. Because the drugs are made by altering the chemical structure of existing ones, they are now unregulated.

In a related development, UN General Assembly set 17 — 22 June 1987 for a world conference on drug abuse in Vienna. Proposed by the UN Secretary-General, Javier Perez De Cuellar, it is yet another recognition of the growing need to crack down on the drug trafficking and the illicit production of narcotics and psychotropic substances (chemically produced stimulants such as amphetamines, barbiturates, and hallucinogens).

OUR NEW HEALTH MINISTER

SHRI P.V. Narasimha Rao, Minister of Human Resource Development has taken over the additional charge of Minister of Health and Family Welfare from June 24, 1986, while Mrs. Mohsina Kidwai, has taken over as Minister of Transport.

Born in an agriculturist family in Karim Nagar District, Andhra Pradesh, on June 28, 1921, Shri P.V. Narasimha Rao was educated at the Osmania University Hyderabad, Bombay University and Nagpur University. He obtained the degrees of B.Sc. and LL.B.

He was elected to Parliament in March 1977 after over three decades of political career in Andhra Pradesh and in the January 1980 General Election was re-elected from Hanamkonda, Andhra Pradesh and in December, 1984, returned from Ramtek (Maharashtra). He was a member of the Andhra Pradesh Legislative Assembly from 1957-1977 and was a Minister in Andhra Pradesh Government from 1962-1971. He was Chief Minister of the State from 1971-1973. He was the General Secretary of the All India Congress Committee in 1974-1976, Minister of External Affairs from January, 14, 1980 to July 18, 1984, Minister in Andhra Pradesh Government from 1962- Minister of Defence from December 31, 1984. He assumed change as Minister of Human Resource Development on 25th September, 1985.

Shri Rao has delivered lectures at various Universities in the United States of America and the Federal Republic of Germany on political and allied subjects. He has maintained an abiding interest in literature and has several publications to his credit, prominent among these are: *"Sahasra Phan"*, Hindi translation of the late Shri Vishwanatha Satyanaryana's famous Telugu Novel *"Veyi Padagalu"* published by Jnanpith: *"Abala Jeevitam"*, Telugu translation of the late Shri Hari Narayan Apte's famous Marathi novel, *"Pan Lakshat Kon Gheto"* published by Central Sahitya Academy (National Academy of Literature).

He is Vice-President of the Dakshina Bharat Hindi Prachar Sabha, Madras and was the first Chairman of the Telugu Academy, Andhra Pradesh.

His special interest are : Indian philosophy and culture ; fiction ; political thought ; languages and creative literature in general. His favourite pastimes and recreation are music, cinema and theatre.

Shri P. V. Narasimha Rao

Soon after his appointment as Minister of External Affairs, Shri Rao chaired the IIIrd Conference of UNIDO at New Delhi in January 1980. He also chaired a meeting of the group of 77 at New York in March that year. He was Chairman of the Conference of Foreign Ministers of Non-aligned countries in February, 1981, and led the Indian delegation to the Conference of the Group of 77 on ECDC at Caracas in May, 1981.

Shri P.V. Narasimha Rao presided over meetings of Foreign Ministers of Non-Aligned nations on the eve of the New Delhi Summit and also at the United Nations both in 1982, when India was asked to host the Summit, and the following year when at the initiative of the Movement, informal consultations amongst Heads of State and Government from diverse nations across the world were held at New York. Shri Rao was also the leader of the Special Non-aligned Mission which visited countries in West Asia in November 1983 in connection with the issue of Palestine.

Shri Rao was associated actively with the Commonwealth Heads of Government meeting in New Delhi and with the Action Group set up by the meeting on the question of Cyprus.

In his capacity as Minister of External Affairs, Shri Narasimha Rao has chaired on behalf of India a number of Joint Commissions including those with the U.S.A., U.S.S.R. Pakistan, Bangladesh, Iran, Vietnam, Tanzania and Guyana. ○○

AN INNOVATIVE APPROACH IN MENTAL HEALTH EDUCATION

S. RAJARAM

IN the past, mental health did not find its appropriate place in the national and State health planning, perhaps due to the common misconception that the prevalence of mental illness is low in India, particularly as compared to West. In addition, it was also thought that no effective treatment is available. Research studies from different parts of the country have shown that mental illness is as common in India as it is elsewhere, and is equally common in rural and urban areas. Mental illness causes immense suffering to the affected individual and the people around him, although such a suffering may not be clearly visible to others. With the methods of treatment and prevention available in modern health care, chronicity and disability can be avoided in about 80 per cent of the cases. Complete and lasting recovery is possible in no less than 60 per cent.

The Joint Central Councils of Health and Family Welfare held in August 1982 considered the importance of mental health in the total development of Society and appreciated that mental health is an integrated part of total health and therefore should be viewed in that light. The joint conference recommended that mental health must form an integral part of the total health programme and as such should be

included in all national policies and programmes in the field of Health, Education and Social Welfare. Realising the importance of mental health in the course curriculae for the various levels of health professionals, suitable actions should be taken in consultation with appropriate authorities to strengthen the mental health educational components.

Mental health care to all

To achieve the basic mental health care to all, specific approaches and elaborate plans of actions are being formulated for National Mental Health Programme in India.

When the Government and the mental health experts are contemplating over such strategies, it is relevant to focus on the lay public's knowledge, attitude and behaviour towards mental disability and the mentally ill. Still, the treatment of mentally ill people is being governed by primitive superstition and religious dogma. There is mass ignorance and deep-rooted prejudices against them mentally ill. In many places, the cure consists of incantation, exorcism, bizarre rituals, foul concoctions, amulets and charms. Mentally ill are scorned and avoided. They are thought as unproductive, useless and harmful. In such a condition, systematic efforts need to be made collectively to fight against the ill effects of the ignorance on the part of the public. Effective use of mass media would go a long way in adequately counteracting the misconceptions. In addition to such routine educational activities, the mental health professionals especially psychiatric social workers need to organise innovative programmes aiming at educating the public. In fact, each and every professional activity should have consciously planned educational component with it. Then only, it is possible to create an awareness among the public about the disease and that they will be helpful towards the mentally ill and the handicapped.

Integrated Camp approach

One such effort undertaken in this direction by the author was 'the integrated camp approach'. Small groups of mentally ill, and mentally retarded persons were taken for two weeks camps which were conducted in rural setting.

In addition to their medical treatment, they were given a schedule of their day to day programme, focussing on maintenances of personal hygiene, skills in communication and interpersonal relationships and recreational group activities. Above all, they were given opportunities to work in the fields, help in construction activities and get involved in various activities of farming and horticulture. They were gradually allowed to mingle and work with other local labourers. A total of 36 patients were involved in three camps. The improvement noticed in the patients, reactions of the public, interaction of the labourers with the patients were systematically observed and recorded by the Psychiatric Social Worker, who organised these camps and lived with the patients during this period.

In this pioneering attempt, these camp activities were found to have infinite educational, therapeutic and rehabilitational potentials. The following are some of the insights derived from these social exercises in the community :

1. Hidden potentials of the patients can be brought out by organized group activities.
2. Patients, whom the society considers as burden, can be productive and constructive and be an asset to the community.
3. In many of the activities, their work output is in no way less than other labourers.
4. Their work performance could impress the public.
5. Continuous involvement in useful activities and guided group activities by the neighbours, helps in reintegration.
6. There is significant improvement in their clinical, psychological and social functioning.
7. Witnessing these changes, the villagers could view the mental illness in a positive way.

It is in this context, that, the mental health professionals are urged to take a critical outlook on such an approach which implies that mere imparting scientific information is not enough. The public will tend to believe what they see rather than what they hear. The efficacy of modern treatment programmes need to be demonstrated, to be proved. In doing so, professionals should make it a point to make use of indigenous means and avilable resources. Only when such attempts which are effective and relevant to our settings are repeated in different centres, that the educational potentials of such camps will be fully realised by the professionals and the laymen. These professional effeorts may pave the way to achieve effective mental health education to all in 2000 A.D. ●

EXPERIENCES IN FAMILY PLANNING PROGRAMME IN A SLUM COMMUNITY

DR. RAMESH M. CHATURVEDI

" The reluctance to adopt contraceptive methods in many developing countries has religious and socio-cultural roots. Moreover, the illiterate get confused or suspicious when they are exposed to the cold and impersonal mass media. A novel approach by involving the decision makers in the family can breakdown many barriers ".

MALVANI, a slum of about 70,000 inhabitants in western suburbs of Greater Bombay has a well organised health center giving comprehensive health care since December 1977. The population consists of 50% Hindus, 45% Muslims, 3% Christians and 2% others, from low socio-economic group. Initially there was an emphasis on curative component of the comprehensive health services. In the beginning we did not include family planning services as a part of our health package, as the family planning services were usually less accepted by the Muslim community. After two years when we had developed a rapport with the community, we gradually introduced family planning services in our programme.

The first Family Planning Camp was organized in 1981 at the Health Center which could benefit only 5 acceptors. Later on to develop rapport with the women of the community. Ante-natal and Post-natal Care was started in the health center. For management of Intra-natal Care the pregnant women used to get admitted on the basis of our Ante-natal record, in the nearest Municipal Maternity Home, which is located 4 km away from the health center. Previous to this, expectant mothers were registered in the said maternity home and because of non-availability of proper conveyance the expectant mothers defaulted. The Ante-Natal care (A.N.C.) registration in our center has given us a good opportunity to come in contact with pregnant mothers. Three hundred expectant mother were interviewed regarding their non-acceptance of any of the family planning methods.

Reasons for non-acceptance

Their reasons and beliefs for non-acceptance of family planning methods were listed as under:

(1) The routine post-partum sterilization operation required admission at the hospital. The mother could not remain away from her other younger children, nor could the father afford to lose his daily wages, if he chose to look after the children.

(2) There was a belief spread by word of mouth among women that spinal anaesthesia would cause chronic backache (In India chronic backache is due to a diet deficient in calcium).

(3) Many women wanted sterilization done in secrecy on religious or social grounds. Hence they did not want to have a scar or hospitalization as an evidence.

(4) There is a belief that after tubal ligation they cannot lift weights (women have to fetch water for domestic use from common taps).

(5) In post-operative cases minor unrelated ailments were not attended to, by the health care personnel.

(6) 61% of women wanted contraception but their husbands objected.

(7) 96% women did not want to get their husbands sterilized, since they feared that something untoward might happen to the bread earner of the family (The husbands being the sole earning members in most nuclear families in India).

Author taking a parent craft session in the community

(8) Many women were aware of contraceptive methods available, but 3% of them did not know what to choose or whom to ask.

Husband Craft

As majority of the husbands objected to their wives acceptance of family planning methods, it was necessary to involve the husbands (the decision makers in family) to participate in ANC so that they should be aware of their responsibility as fathers. The husbands were called for a subsequent meeting which was held on Sundays (Sunday being a public holiday). In the beginning, the husbands' attendance was very poor. Then it was announced that the expectant mothers would get the privilege of admission at Municipal Maternity Home only after their case sheet was signed by the authority conducting the meeting subsequent to their husbands' attending the meeting. After this announcement there was a big crowd on Sundays for the meeting. In the Sunday Husband Craft meetings health education was imparted, on A.N. Care with emphasis on laparoscopic method of sterilization, IUCDs (Copper-T) and immunization of the newborn by using models and charts.

The advantages of laparoscopic sterilization over the older method of tubal ligation was explained to them. During the education of parent it was emphasized that the laparoscopic sterilization could be performed at any time after delivery, under local anaesthesia without hospitalizing the mothers and that this was a simple procedure taking 10 minutes without any visible abdominal scar.

Even trivial ailments, unrelated to the family planning procedure, were attended to at the centre. So the acceptor got access to different components of the health package all under one roof.

With this appproach of involving husbands in ANC, our family planning programme got a boost. Now we perform sterilizations at the rate of 1 per day and insert IUCDs at the same rate. Husbands' involvement also improved the overall ANC performance.

In our programme 44% of acceptors were Muslims and 53% were Hindus, thus showing no influence of religion over family planning acceptance. Many family planning acceptors (mothers) motivated other mothers for accepting family planning methods in keeping with the principle "A satisfied customer is the best salesman".

Very little is known about male attitudes and preferences regarding contraception. Most surveys and hospital studies involve only women. The novel idea of calling a husband to attend **husband craft** classes is for involving them in bringing up the child (A farmer's responsibility does not end once the seeds are sown; he has to sweat it out and look after the crops till harvest time). The husbands are also told of their responsibility as 'head' of the family, in ensuring that each child is well spaced and looked after.

The policy makers should realise that in most third world countries, propaganda and information related to any health or family planning programme should be beamed at the **decision maker** in the family. In most Asian countries like India, the husband decides and dictates what the wife should do (Unlike in the West where the woman has a greater say in the family). This simple realization will go a long way in removing many of the obstacles that hinder the family planning programme in most countries of the world. ●

BOOKS

" Environmental Health Aspects of Industrial and Housing Estates" SEARO Regional Health Papers No. 11, 56 pages, Price : Ind. Rs. 21.—.

Many of the medium-and small-scale industries established in industrial estates today are not of the traditional agro-based types but include complex and potent chemical industries that can affect health and the environment, the causes ranging from vector-borne diseases to complex ecotoxic effects. Assessment of the impact of these industries on environmental health is difficult because, in most cases, it is not possible to know in advance the types, numbers and magnitude of the industries that will be established in an estate, nor the period within which they will all be in position. Furthermore, the induced and unplanned growth that invariably occurs around an estate aggrevates the environmental health problems. This publication outlines some environmental health impact considerations which should prove useful to planners, developers and health professionals facing such problems.

In planning industrial and housing estates, a *rapid* assessment of the likely environmental health consequences is first made, followed by a more detailed assessment if necessary. The text explains precautions necessary in siting housing estates and in planning the buildings and their infrastructure facilities. Appropriate strategies for pollution abatement in keeping with national environmental standards and regulations should be given due consideration at the conceptual and planning stage itself rather than after the establishment of the estate.

Post-implementation monitoring and surveys are the final exercise by which the likely impact of the operation of the estate on public health can be identified and assessed where the nature of the industries warrants such action. These include periodic sanitary inspections and regular monitoring of the emissions and ambient environmental quality. Some guidelines in this regard have been given in this book. The organization of proper institutional arrangements and the allocation of responsibilities are the keys to the success of the programme but often constitute the neglected "grey area". ●

Authors of the Month

K. Balan
Puthiyadath Tezha Kuniyilhouse
Chokli 670672
Via Tellicherry
Cannanore Distt, Kerala

Col. P. K. Dutta
Associate Professor
Department of Preventive & Social Medicine
Armed Forces Medical College
Pune 411040.

Lt. Col. A. C. Urmil
Reader
Department of Preventive &
Social Medicine
Armed Forces Medical College
Pune 411040.

Dr V. Balakrishnan
Professor and Director
Department of Gastro-enterology
Medical College
Trivandrum.

Col. K. K. Vadehra (*Retd*)
Professor and Head
Deptt. of Social & Preventive Medicine
Dayanand Medical College
Ludhiana.

S. Rajaram
Psychiatric Social Worker
National Institute of Mental Health
and Neuro Sciences
Bangalore 560029.

Dr Vinod Kumar
Associate Professor
Deptt. of Medicine
All India Institute of Medical Sciences
Ansari Nagar
New Delhi 110029

Dr Ramesh M. Chaturvedi
Lecturer
Deptt. of Preventive & Social Medicine
Seth G. S. Medical College
Parel
Bombay - 400012.

Vinod Kumar Pandey
Research and Evaluation Division
Central Health Education Bureau
Kotla Road, New Delhi - 110002.

Schools help in Goa Survey

Responses were received from 145 schools out of a total of 450 in Goa, India, to whom questionnaires were sent by the Goa Cancer Society regarding tobacco use in homes.

The schools were selected as a source of information on the assumption that children could give reasonably accurate information on whether parents smoked or chewed tobacco.

The responses represented 40% (54,256) of the total school population, and were addressed to the age group 10-15. Of these a total of 56% live in rural areas, and the other 44% in the cities and suburbs.

Analysis of the survey indicates that smokers and tobacco chewers represent a much higher proportion of rural dwellers than of urban populations.

In rural areas as many as 61.8% of fathers and 6.6% of the mothers are smokers, while in urban areas 29.06% of fathers and 2.6% of the mothers are smokers.

Similarly, in the rural areas 12.02% of fathers and 16.2% of mothers are tobacco chewers, compared with 8.80% of fathers and 7.8% of mothers in urban areas.

The possibility of using the schools as a medium to transmit health information on tobacco to parents, particularly in the rural districts, is now under study.

Dr S. G. Vaidya
Honorary Secretary
Goa Cancer Society

ISSUED BY THE CENTRAL HEALTH EDUCATION BUREAU (DIRECTORATE GENERAL OF HEALTH SERVICES), KOTLA MARG, NEW DELHI-110 002 AND PRINTED BY THE MANAGER, GOVERNMENT OF INDIA PRESS, COIMBATORE-641 019.

Regd. No. D-(C) 359
Regd. No. R.N. 4504/57

OUR PUBLICATIONS

POSTERS

	Price Per copy Rs. P.	Price Per 100 copies Rs. P.
Smoking can cause cancer (Hindi and English)	0.35	30.00
Our children need clean habits (Hindi and English)	0.35	30.00
Our children need healthy recreation (Hindi and English)	0.35	30.00
Your sputum may spread disease (Hindi and English)	0.35	30.00
V.D. (S.T.D.) is curable (English and Hindi)	0.35	30.00
Breast milk—the best for your baby (English and Hindi)	0.35	30.00
Regular treatment for at least one year cures T. B. (English and Hindi)	0.35	30.00
Presistent cough—have sputum test (English and Hindi)	0.35	30.00
Prevent goitre	0.35	30.00
Our children need. . Safeguard against accidents	0.35	30.00

Please send your order alongwith the money in advance by crossed Indian Postal Order, Draft or money order to :

FOLDERS

- You can prevent dysentery
- Thread worm
- Round worm
- You can prevent Dengue Fever
- You can prevent Jaundice
- When the unexpected happens
- You can prevent Typhoid
- Safe water, clean surroundings
- You can prevent Cholera
- Guinea Worm
- You can prevent Rabies
- Goitre
- Immunization Schedule
- Oral Cancer
- Ring worm
- Hook worm
- Syphilis
- Heart attack
- Care of the ear
- You can prevent Lathyrism

Price per Folder: 0.05 paise
Price per 100 Folders: Rs. 5.00

BROCHURES

- Asha visits the Dentist

Single copy : 0.25 paise
100 copies : Rs. 25.00

The Director
Central Health Education Bureau
Directorate General of Health Services
Kotla Marg, NEW DELHI-110 002.