

Health Education for Tuberculosis Drug Defaulters

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The effect of initial motivation by Health Education, in terms of regularity of drug collection and the knowledge, awareness and practices of T.B. drug defaulters were studied in a rural community in West Bengal. It was observed that Health Education could motivate the clients for drug collection. Hence it was suggested that follow-up visit and follow-up health education programme by the Public Health Nurse and other health workers may solve the defaulter problem of the community in the long run.

TUBERCULOSIS continues to be a serious hazard to public health in India. Out of approximately one crore persons estimated to be suffering from acute Tuberculosis, nearly one-fourth are infectious in every 1 lakh population; about 80 persons die of T.B. every year, CFR=8 per 1000.

To tackle the problem, fully equipped and staffed district Tuberculosis Centres (Approx. 600) have been established under National Tuberculosis Programme in 553 districts. In addition, there are about 300 T.B. Clinics which undertake treatment of patients at their homes. Nearly 44,000 T.B. beds have been established all over the country where free treatment facilities are available.

The National Report on T.B. Programme, 1981-82, showed that about 25 per cent of 'cases' initiate treatment, complete it during the prescribed period and the remaining become defaulter and even many get 'lost' at various levels of therapy, resulting not only in prolonged suffering but also in interference in cutting off transmission of diseases.

The earlier approach of blaming the patient for dropout or for default is changing now to provide a wider base of understanding the problems of drug defaulters.

Drug Defaulters and their Problems

Drug defaulters are a global problem in the treatment of Tuberculosis and are as old as the discovery of medicines. It is one of the leading public health problems in India, in spite of the fact that Tuberculosis today is both curable and preventable. This is because a drug defaulter poses a threat not only to himself but also brings considerable sufferings to the family and community as a whole, by spreading the

drug resistant bacilli. A study conducted by G. Singh,¹ showed that in all those cases where the drugs needed to be administered for a long time, they caused social and economic hardship to the individual, family and the country. It also caused many additional problems for the T.B. Clinic, like default action, retrieval of defaulters. And, all these problems seriously undermined the progress of control programme in the community.

The problem of defaulters is of concern to both medical and Nursing personnel. Physicians have been trying to analyse them in terms of the level of drug collection and default related to sputum conversion, while the nurses have viewed them in terms of socio-economic situation like occupation, education, age, sex, and others like non-availability of drugs and transport facilities. For a proper understanding of the situation an interdisciplinary approach is required.

The present study was conducted with an aim to assess the socio-economic and other factors associated with drug defaulters, and effect of health education in motivation of such, attending chest clinic of Rural Health Unit and Training Centre, Singur, District Hooghly, West Bengal.

Methodology : 72 cases were found as drug defaulters from the 255 cases registered in the clinic during June 1981 to May 1983. A structured interview schedule was prepared and pretested and used to elicit the following information : (a) base line data (b) period of treatment (c) reason for drug discontinuation (d) attitude of patients towards that knowledge, (e) practices towards the causes, spread sign and symptoms (f) effect of drug discontinuation to the individual, family and community.

The informations were collected by home visiting. Based on the findings an educational programme on prevention of Tuberculosis and active community participation was organised. The following objectives were envisaged : (1) To help the individual client and his family to acquire knowledge and information on Tuberculosis. (2) To motivate the client for collection of drugs regularly.

Material and Methods : 1. Necessary health education materials like flash cards, flip charts, posters were prepared, pre-tested and used for health education purpose. 2. Village leaders were contacted individually in order to apprise them of the extent and seriousness of the problems. 3. A village mass meeting and exhibition were organised. 4. Each and every defaulter was contacted, educated and motivated by the investigator.

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Discussion and Results

Out of the 72 defaulters studied 71 of them reported back on being approached through home visit by self and they were then instructed regarding the difficulties which they would face if they became permanent defaulters. The survey also stated that a number of factors were responsible for drug defaults and they have been grouped as : (a) those related to patient; (b) those related to clinic; and (c) those related to disease.

Table I : Number and percentage of TB defaulters according to educational status

<i>Educational status</i>	<i>Number</i>	<i>Per centage</i>
Illiterate	54	75.0
Literate	10	14.3
Primary school	5	7.5
Middle school	2	2.8
High school	1	0.4
Total	72	100.0

(a) *Factors related to patient* included ignorance about the disease, poverty as most of the clients were poor (61.2%); among them 45% belonged to 44 years of age group; they were unskilled labour and had to work in spite of their sufferings. It was also observed that a majority were illiterate (75%: Table-1) The study is supported by another study by Pamra *et al*² who stated that one of the reasons for irregular treatment was poverty and ignorance.

(b) *Factors related to clinic* : As seen in the study such factors included clash of clinic timings with working hours of the patients, and distances of the clinic from residences. Taking together, these factors accounted for 37% of cases and non-availability of drugs accounted for 15.3% cases.

Under the District T.B. Programme (DTP) incentives like providing free drugs near the patient's home through the Health Centres of their choice was recommended to encourage the patient to complete the treatment. They have also stressed on initial motivation by Health Education, by the Health Worker, Public Health Nurse and drug distributors during the initial treatment. All these may help the patient to understand the need for long duration of treatment to comply with the instruction.

(c) *Factors related to disease* included : Disappearing of symptoms after taking drugs for a few months. The present study showed that 50% clients left treatment as they felt cured after taking medicine ranging from 3 to 5 months which is supported by another study by Pamra *et al*² (Table II). As regard knowledge and attitude, 71.2% clients knew about their sufferings but none was aware of the fact that inhalation of germs was the cause; 50% knew the sign and

symptom; 83% believed that sufferings did not cause any harm to them, or to their families. All felt that defaulters were not a problem to the community.

The study also depicted that the first three months of the treatment period were the crucial time when most of them became defaulters. The possible reason for such a behaviour may be that they are influenced by their families and friends when they return home after collection of medicines and also because anti-tubercular drugs initially resulted in cessation of symptoms, giving an erroneous belief to the patient that he is cured. The health education programme was organised at home as it was thought that the presence of the family may help in motivating the defaulters because often the family members got motivated.

To ascertain the effect of health education imparted through home visit a mass approach questionnaire was applied to the study population. It was observed that 93% clients were aware of the disease; 97% clients realised the importance of continuation of drugs and all 100% realised that discontinuation of treatment is harmful to individual, family and community.

Role of Health Education in Motivation of Drug Defaulters : Health education concept for prevention of disease and promotion of health has not been much accepted by the common people in India. The fact may be that the chief means of preventing disease under the individual control consists, on the one hand, of forsaking bad habits which many people have, and, on the other hand, of doing things which require conscious effort, and lack of effective communication.

Table II : Number and percentage of TB defaulters and the reasons for discontinuation of treatment.

<i>Reasons for defaulting</i>	<i>Number</i>	<i>Percentage</i>
Felt cured	36	50.0
Non-availability of drugs	11	15.3
Clash of clinic times with working hours (occupation)	5	7.5
Distance of clinic from residence	20	27.7
Total	72	100.0

The objective of communication about health is to achieve the fullest possible understanding of the knowledge, ignorance and beliefs of the largest population and for their attitudes, positive and negative, about health (Young : 1967, Wade : 1970).⁵ The greatest difficulty which health education has to contend with is that the lowest social strata of society have the highest morbidity but it is very difficult to communicate with them about health. They have an

average lower intelligence, much early acceptance of the inevitability of illness and less acceptance of the view that man is the master of his fate which characterised the more successful section of our society (Jeffer: 1957).⁵ They also make much less use of preventive service.

Stages of Health Education

1. *To Provide Information*: People will not stop doing something they enjoy without being given good reasons for doing so. In case of a drug defaulter, they must understand in clear and simple terms what risk they run, whether the risk can be diminished by regular check-ups and what is the source of information. Man being a social animal will be much more influenced by the neighbourhood, community leader and family member, although the nurse and health worker play an important role in providing information as a whole. To be effective and to be remembered information should be given repeatedly and from as many sources as possible as single health campaigns have been found to have very little immediate and no lasting effect (Martin and Stanley: 1965, Health Education Council: 1971-77).⁵

Table III: Distribution of defaulters on their knowledge or cause of disease before and after giving the health education programme.

Knowledge on cause of disease	Pre-test		Post-test	
	Number	%	Number	%
Inhalation of germ	—	—	67	93.0
Heredity	14	19.44	—	—
Do not know	36	50.0	—	—
Evil spirit	2	2.8	0	0.0
Contaminated stool, urine	10	13.8	—	—
Staying with TB patient	10	13.8	5	7.3
Total	72	100.0	72	100.0

2. *To Change Attitude*: There is much controversy in the behaviour and social science literature about the precise meaning of attitude and still more about assessing changes in attitude (Halloran: 1967)⁶. It has until recently been accepted that in the context of Health Education, a change of attitude implies acceptance by an individual that the information he has received about a desirable change of habit is what is relevant to himself to some way.

3. *To Change Behaviour*: That a drug defaulter should restart treatment is the chief aim of the health educator. To achieve this he or she must be concerned with stages of care, especially when the patient feels a sense of well-being while the disease remains. Information about health should be initiated as the first step but it must be believed and be accepted as personally relevant. The final aspect that is the follow-

up visit for evaluation is one to which too little attention has been paid and this should get emphasis in reducing the defaulters' rate.

Table IV: Distribution of respondents on their knowledge on signs and symptoms of disease before and after giving the health education programme.

Sign/symptoms	Pre-test		Post-test	
	Number	%	Number	%
Cough	36	50.0	70	97.0
Fever	20	27.7	54	75.0
Weakness	10	13.8	25	34.7
Night sweat	11	15.3	45	62.5
Chest pain	2	2.8	64	88.9
Haemoptesis	3	4.2	70	97.2
Do not know	36	50.0	2	2.8

Channel of Health Education

Advertisement, press campaign and broadcasting are the main channels. Advertisements are expensive and not very effective means. Persistent mailing is useful but seems remote from the individual. Advertisements in newspaper are transient. They can effectively draw the readers' attention but will not motivate the defaulters and patients in general. TV and radio may be more effective because of their particular personal approach. The viewer or listener has the impression that "he is being spoken to as an individual". The respect that is so widely given to what is seen on TV is explicit and the advertisers often used phrase like "as shown in TV". Broadcasts on radio have the advantage of convenience and portability of the reviewer as well as the personal approach.

Health professionals have a special opportunity for health education, since they have contact with a large number of people at a time, when they are seeking help about their health and thus more likely to be responsive to accept precautionary advice. From the study it was observed that after receiving every information about the disease and ill effect of drug discontinuation almost all the patients agreed about their fault for not collecting drugs in time. Since the victims of this disease mostly attend hospital clinic or health centre the nurse and other health worker could provide an almost complete health education service.

Too little use at present is being made of this opportunity, as health centres and clinics of hospitals are not equipped with adequate staff and educational material and it would be easier and quicker for health professionals to have pamphlets or tape slides for patients to consider and then return for clarification which could provide reinforcement.

Community Group Approach

Almost every one belongs to some social or occupational group and an educative approach to

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such groups may be more effective than individual approach. Individuals who do not wish to listen to radio but in a group may be willing to challenge a presentation or to take part in discussion and often group support may initiate steps for reducing the number of drug defaulters. The sort of groups where this type of approaches could be made are in societies such as Rotary Clubs, Women's Clubs, even occupational groups like social welfare organisations at places of work. The main difficulty about this approach is to find people who have sufficient knowledge of the facts about Tuberculosis and sufficient ability as speakers to give effective talk to such groups and to stand up a cross questionnaire. Health professionals with their background and knowledge in this speciality could prove a reliable source as speakers and discussion leaders. They can identify and train the community leader, who in the long run will conduct such programmes from time to time in their own community for clients in order to reduce the drug defaulter problems.

Conclusion

As every person suffering from T.B. needs to complete the drug regimen for a certain prescribed period emphasis has been given to domiciliary treatment. But studies under D.T.P. have shown that only 25% can complete the treatment by domiciliary approach. In the present study the investigator wanted to find out the reasons for this and assess the role of health education in motivation of the defaulter. Information on knowledge, attitude and practice were obtained with the help of structured interview schedule. On the basis of findings health education programmes on T.B. were organised in the community with the active community participation.

The following was observed :

- (1) Illiteracy, ignorance and poor socio-economic status were major factors responsible for defaulters.
- (2) Feeling of a sense of well-being after consumption of medicine for about one month or so, encouraged the clients to stop drugs.
- (3) Most of the clients knew the name of the disease.
- (4) Very few knew that T.B. was preventable and the ways and means of prevention.
- (5) Majority believed that discontinuation of treatment was not harmful.

Clinics' working time, distance of clinics from the residences and non-availability of drugs were partially responsible for the dropouts. Almost all the clients were motivated by the health education programme and attended clinics for collection of drugs. Therefore, health education programme plays an important role in motivation of drug defaulters.

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References

1. Singh, G., Banerjee, S.C. *et al.* : A study of defaulters in anti-tuberculosis therapy. *Ind. J. Tub.*, 23, 93, 1977.
2. Pamra, S.P., and Mathur, G. P. 'Drug defaulters in an urban community.' *India J. Tub.*, 14, 199, 1967.
3. Seeth, M.A. and Aneja, K.S. 'Problems of drug default and role of motivation', *Ind. J. Publ. Hlth.*, 26, 4, 1982.
4. Khanna, *et al.* 'Drug defaults in T.B.', *Ind. J. Tub.*, 24, 3, 1977.
5. Bennett, A E. (Ed) '*Recent Advances in Community Medicine*'. Churchill Livingstone, Edinburgh, London and New York, 1978.

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