

## CHAPTER III

### ILLNESS PERCEPTION & UTILIZATION OF HEALTH FACILITIES

#### *a. Community Survey Based*

177

AU: Banerji D & Andersen S

TI: A sociological study of the awareness of symptoms among persons with pulmonary tuberculosis.

SO: BULL WHO 1963, 29, 665-683.

DT: Per

AB: This study was undertaken in 34 villages and 4 town blocks where a few weeks earlier an epidemiological survey was carried out. All persons above 20 years whose photofluorograms were read as inactive, probably active, or active by at least one reader, were age-sex matched with an equal number of X-ray normals, to form the experimental and control groups respectively. Thus, a total of 2,106 were eligible for social investigation. Interview sheets, with particulars of the name and location of village, household number and individual number and the identifiable data of the interviewees were made available to the Social Investigators at random for contacting and interviewing them at their homes. The interviews were non-suggestive in nature and deep-probing on the details of symptoms experienced by the respondent, which were fully recorded. About 79% of the experimental group and 83% of the control group were satisfactorily interviewed, which constituted the data further analysed. Of the numerous symptoms recorded, only that were associated with pulmonary TB were considered, of which cough occurring for one month or more, fever for a month or more, pain in the chest, haemoptysis and all combination of these four symptoms were analysed statistically.

Cough was found to be the most important single symptom. It was not only the most frequent symptom alone or in combination in the experimental group but was less frequent in the control group that 69% of sputum positive and 46% of radiological positive had cough while only 9% of the control group had it. Considerably fewer people had fever and pain in the chest. Pain in the chest appears to be non-specific, giving a ratio of only 2:1 among the experimental and control groups, while fever was in the ratio of 6:1 and haemoptysis was 11:1. It was seen that 69% of the sputum positive cases, 52% of the X-ray active or probably active, 29% of the inactive and 15% of the normals (control group) had at least one of the above mentioned symptoms. In all the groups, the proportion of symptoms was higher among males than among females. In both males and females the prevalence of symptoms was higher in the middle age groups than among the younger or older groups. This age variation was more marked in the females. The findings of the study were analysed further along with the data obtained from a couple of minor investigations conducted in the rest of the 28 villages which formed the total of the villages surveyed epidemiologically. This brought out further that 95% of bacteriologically positive cases are aware of symptoms, 72% experience 'worry awareness' and 52% form the action-taking group. The above findings have been of considerable importance in planning further studies and in formulating the NTP.

KEYWORDS: SOCIAL AWARENESS; INDIA.

**178**

AU: Zak GJ

TI : Knowledge of tuberculosis among healthy people and tuberculosis patients as a factor in public acceptance of the methods of prevention and treatment of tuberculosis.

SO: GRUZLICA CHOR PLUC 1968, 36, 571-580.

DT: Per

AB: The study, made by means of questionnaires in 1964-66, dealt with the problem of acceptance of methods of prevention and treatment of TB by various social groups of population.

KEYWORDS: SOCIAL AWARENESS.

**179**

AU: Tewari RN, Jain PC & Prasad BG

TI : A medico-social study of pulmonary tuberculosis in Mati village, Lucknow.

SO: INDIAN J MED RES 1969, 57, 2283-2288.

DT: Per

AB: A modified medico-social survey of Mati village in the area of the Rural Health Training Centre, Sarojini Nagar, Lucknow was carried out during January to October 1967. A total population of 2,544 persons living in 419 families was investigated. One hundred and eighty-six (7.31 %) persons were found to be symptomatics, 70 (37.6 % of symptomatics) X-ray suspects and 21 (30.0% of X-ray suspects) bacillary cases. The most frequent symptom was cough followed by pain in chest, dyspnoea, fever and haemoptysis. Duration of symptoms was more than one month. The prevalence of X-ray suspects among symptomatics increased with advancing age. Social classes III (lower middle), IV (poor) and V (very poor) suffered increasingly more from the disease. Tendency amongst the patients was to attend the nearest health facility for relief of symptoms. Default was common due to ignorance and lack of proper supervision of patients.

KEYWORDS: DEFAULT; SOCIAL SURVEY; INDIA.

**180**

AU: Krishnaswamy KV, Abdul R & Parthasarathy R

TI : A sociological study of awareness of symptoms of pulmonary tuberculosis and action taken by the patients to seek relief.

SO: INDIAN J TB 1977, 24, 15-20.

DT: Per

AB: Awareness of symptoms of pulmonary TB and promptness of action taken to seek the treatment by the sufferers in an urban area, Madras, was studied. A total of 796 patients were administered questionnaires, out of whom, 600 were men and 196 were women. The mean age for men and women were 37 years and 32 years respectively. The proportion of patients drawn from all the 3 selected areas who took action within a month was 40 percent, within 3 months 65 percent and within 6 months 84 percent. The proximity of the medical facility in the city enabled a sizable proportion (53%) to take action within a month. Among symptomatics reporting within a month, the bacillary cases were proportionately low which tended to increase as time elapsed. Regarding the psychological impact of the disease on the patients, there was a sense of optimism in a large proportion of patients due

to a very favourable response to good treatment. Varied attitudes of the relatives towards the patients, consistent with Indian stereotypes were elicited.

KEYWORDS: SOCIAL AWARENESS; SOCIAL ACTION; INDIA.

## 181

AU: Radha Narayan, Prabhakar S & Susy Thomas

TI: A sociological study of awareness of symptoms and action taking of persons with pulmonary tuberculosis (a re-survey).

SO: INDIAN J TB 1979, 26, 136-146.

DT: Per

AB: A study on awareness of symptoms of pulmonary TB and action taking was repeated in the 62 villages and 4 town blocks of Tumkur district of Karnataka after an interval of 12 years. In the earlier study, 2106 persons formed the study population. In the present study, 1752 were intaken to obtain a comparison of these 1752 intaken persons who were eligible for interview, 875 were X-ray positive and 877 X-ray normal (matched control).

The study showed that 95% of patients having radiologically active TB by both X-ray readers, 70% by one reader, 49.5% inactive by both readers, were aware of symptoms. According to the bacteriological status 79.5% had symptoms among those who were sputum positive by both microscopy and culture, 62.2% among those positive by culture alone and 73.7% among patients sputum positive by any method. Regarding action taking it was observed that 49.5% of the bacteriologically positive patients took some action compared by 70% of those found to have radiologically active disease by both X-ray readers. Thus, action taking was higher among the latter category in both the studies. It may be due to the fact that extent of lesions are less advanced among those bacteriologically positive than among those who were in radiologically positive stage.

The findings of the study are similar to the earlier awareness study carried out in 1963 in the same area (Tumkur). This also indicates that in spite of having advantage of DTP for a decade actual and total benefits have not reached the people.

KEYWORDS: SOCIAL AWARENESS; SOCIAL BEHAVIOUR; INDIA.

## 182

AU: Radha Narayan, Susy Thomas, Srikantaramu N & Srikantan K

TI: Illness perception and medical relief in rural communities.

SO: INDIAN J TB 1982, 29, 98-103.

DT: Per

AB: Illness is mostly a subjective awareness of an individual, the relief of which may be sought within or outside medical or health facilities. Perception of illness vary from people to people depending upon cultural, ethnic and socio-economic differences. Perception of symptoms by persons suffering from TB is very high yet only half of them approach modern medical facility for alleviation of their suffering. A survey was carried out in rural area of Hoskote taluk, Bangalore district to determine perceived morbidity and accessible medical relief in 1433 households belonging to 18 villages; of them, 1393 (97%) were successfully interviewed. Selected households belonged to three types of villages i.e., those



Health Visitor at work

being within 3 kms of a i) PHC, ii) taluk headquarters hospital and iii) non governmental health centre.

Of the 9286 individuals belonging to 1393 households satisfactorily interviewed regarding health, 1201 (12.9%) were found to be ill at some point of time during the reference period of one month. No differences were observed in the perception of morbidity or in the health seeking behaviour in the three groups of villages. Persons with symptoms/disease accounted for 88.8% of the total sickness, 3.4% for injuries and 9.3% for disabilities, while action taking was 61.6%, 90% and 13.5% respectively. Age sex distribution showed no difference in illness occurrence. Sputum was collected from 147 chest symptomatics and seven were found to be sputum positive. Government health facilities were utilized by 37.6% of the sick persons, private doctors by 36.4%, nature medicine by 10.6% and home remedies by only 9.9%. In conclusion, the services at the government health facilities were acceptable and were utilized if accessible. Prompt and adequate relief for injuries and acute indispositions ensures confidence of the people and better utilization.

**KEYWORDS:** SOCIAL AWARENESS; SOCIAL MEDICINE; INDIA.

**183**

- AU: Radha Narayan, Pramila Prabhakar, Prabhakar S & Srikantaramu N  
TI: Study of utilisation of general health and tuberculosis services by a rural community.  
SO: NTI NL 1987, 23, 91-103.  
DT: Per  
AB: NTP reaches people through PHCs and sub centres. A study was conducted to find out the perception of illness and utilisation of health facilities by the community. This study was conducted in a random sample of 48 villages selected according to Probability Proportioned to Size within 5 kms. of the selected PHIs in Kolar district using a multi stage sampling technique. Information on socio-economic status, availability of health services and their utilisation was collected. 13,323 individuals were interviewed. 706 were ill in a period of two months prior to survey. 71.3% had taken allopathic system of treatment. 69.1% had approached government hospital or PHC. 34 patients reported to have TB. All had attended either DTC or PHC.

The study indicated that morbidity was perceived much early and also followed by an action. Data indicates a high percentage of preferring allopathic system in general and from peripheral health centres and other government hospitals in particular. Data indicates that in spite of overall backwardness of the study area and very limited economic resources people have utilised the PHC to the maximum. The reason could be either high acceptance of PHC or inevitability. But, there is an evidence of higher utilisation of family welfare and MCH services. The data shows all TB patients have had exposure to standard regimens, all of them have approached either PHC or DTC for treatment. This confirms the felt need oriented concept of NTP. Also high level of morbidity among children below 4 years of age and action taken indicate an enhanced level of demand for health services.

KEYWORDS: SOCIAL BEHAVIOUR; SOCIAL ASPECTS; HEALTH SERVICES, UTILIZATION; INDIA.

**184**

- AU: Geetakrishnan K, Pappu KP & Roychowdhury K  
TI: A study on knowledge and attitude towards tuberculosis in a rural area of West Bengal.  
SO: INDIAN J TB 1988, 35, 83-89.  
DT: Per  
AB: A survey was carried out in the population of Bisnupur Blocks I and II in the south 24 parganas district of West Bengal to find out the level of general knowledge and awareness about TB and also the prevalent social attitudes towards the disease. The target population was classified into two broad groups comprising persons living within and outside the research project area respectively. The results showed that the general knowledge of TB was high in both groups and about 24% of the new patients did not know the correct duration of treatment. The majority of people interviewed, favored hospitalization of the TB patients and the patients' belief that consuming anti-TB drugs without taking a high protein diet was futile contributed to default on drug collection. Women with TB denied breast-milk to their babies, making the babies vulnerable to different diseases including TB. Health education increased the awareness of TB while negative social attitudes for TB patients persisted because most people were not convinced of the curability of the disease.

The above findings led to the conclusion that community leaders should be actively involved in any TB control programme and that health education should be an important component of the TB programme.

KEYWORDS: SOCIAL SURVEY; SOCIAL AWARENESS; SOCIAL ATTITUDE; INDIA.

## 185

AU: Purohit SD, Gupta ML, Arunmadan, Gupta PR, Mathur BB & Sharma TN

TI: Awareness about tuberculosis among general population: A pilot study.

SO: INDIAN J TB 1988, 35, 183-187.

DT: Per

AB: Three sets of questions pertaining to general aspects, diagnosis and treatment and, preventive aspects of TB were introduced to the general population, in Jaipur, to assess the extent of their knowledge about TB. A total of 1,000 persons, consisting of 740 males and 260 females, were interrogated in this survey. 380 belonged to rural areas and the rest to urban areas; 860 persons were literates and 140, illiterates; 650 came from a low socio-economic group in comparison to 350 from a better economic status. Responses in all the three sets were separately categorised as correct when more than 50 percent of the answers were correct. Analysis of all the answers was correlated with socio-economic factors. Though the urban population had better knowledge about general and diagnostic aspects of TB, both populations were poorly acquainted with its preventive aspects. General knowledge about TB was poor in the illiterate, low socio-economic population and high in the literate, high socio-economic group.

KEYWORDS: SOCIAL LITERACY; SOCIAL AWARENESS; INDIA.

## 186

TI: Awareness of tuberculosis: Editorial.

SO: INDIAN J TB 1989, 36, 69-70.

DT: Per

AB: The inquiry into people's awareness of TB has largely followed two schools of thought. The earlier conception about the awareness of TB was centered on the extent of people's knowledge about the disease and its characteristics, how the infection spread, when and where it typically occurred etc. However, several studies such as the one conducted by the NTI in rural Anantapur district in the late '50s and which led to the formulation of the DTP, demonstrated that, in contrast to the hypothesis, knowledge about the main features of TB was quite high. Other, more recent studies conducted in India and, studies from S. Korea and Japan, where socio-economic conditions are very different, obtained similar results.

The second, more recent approach to awareness focussed on physical suffering caused by the symptoms of TB. This approach was highlighted by the series of NTI studies beginning with their seminal 1963 study titled, "A sociological study of awareness of symptoms among persons with pulmonary TB". Based on the results, it was suggested that awareness of symptoms and action-taking, by way of contacting institutions of modern medicine, be used as parameters for measuring the problem of TB in the community, sociologically and for TB programme assessment. Further, it was emphasized that this approach must be pursued vigorously through action research as it appeared to show great promise in breaking

down the barriers of traditional thinking, prejudices and unhelpful attitudes better and more quickly.

KEYWORDS: SOCIAL AWARENESS; SOCIAL ATTITUDE; INDIA.

**187**

AU: Thilakavathi S

TI: Sample survey of awareness of symptoms and utilisation of health facilities by chest symptomatics.

SO: INDIAN J TB 1990, 37, 69-71.

DT: Per

AB: The TRC, Madras, undertook a sample survey in rural (18,395 persons), urban (17,409 persons) and metropolitan areas (37,290 persons) to identify the chest symptomatics as defined in the NTP. The symptomatics were interviewed by medical social workers to obtain information about the action taken for relief, the type of health facilities utilised and the reason for the choice. Questions were also asked to find out the symptomatics' knowledge about TB. Based on an analysis of the results, more than 80% of the symptomatics were aware, over 75% had taken action, although most had no idea about its causation. Yet, more than 90% had contacted health facilities of which one-half were governmental.

KEYWORDS: SOCIAL AWARENESS; HEALTH CARE; INDIA

**188**

AU: Rajeswari R, Diwakara AM, Sudha Ganapathy, Sudarsanam NM, Rajaram K & Prabhakar R

TI: Tuberculosis awareness among educated public in two cities in Tamil Nadu

SO: LUNG INDIA 1995, 13, 108-13.

DT: Per

AB: A questionnaire on source of information regarding TB, signs and symptoms, diagnostic methods, treatment duration and personal and community hygiene relating to TB, was administered to 446 students and employees with an educational status of high school certificate and above.

The main source of information were books and magazines and 86% were aware that the TB germ was the causative agent. Symptoms of TB such as cough (85%) and loss of weight (74%) were well known. Other symptoms such as chest pain (29%), fever (27%) were less known. Sputum examination as a diagnostic tool was known to 68% , while 80% knew about radiograph being used to diagnose the disease. Cough as a method of spread was known to 91%. In this questionnaire the duration of treatment was the least known fact. 28% felt that treatment could be stopped if symptoms disappeared. 16% were aware that the method of sputum disposal was by incineration. The implications are discussed.

KEY WORDS: SOCIAL AWARENESS; LITERATES; INDIA.

**189**

- AU: Marinac JS, Willsie SK, McBride D & Hamburger SC  
TI: Knowledge of tuberculosis in high-risk populations:survey of inner city minorities  
SO: INT J TB & LUNG DIS 1998, 2, 804-10.  
DT: Per  
AB: Educational programs targeted toward individuals at risk for TB are needed. As an initial step in developing future programs, the present study was designed to determine the baseline knowledge about TB in at-risk individuals.

Face-to-face surveys were conducted with 505 minority subjects in the Kansas City Metropolitan area; health care providers were excluded. Thirty six queries directed toward self-perceived and actual TB knowledge were asked. Data was tabulated and per cent correct response was determined.

Completed surveys were available from 505 subjects: 342 females and 163 males. Most (97%) of the subjects were African Americans, with 57% between the ages of 21-40. Over two-thirds were high school graduates, and 77% reported an estimated total household annual income of <\$20000. Self-perceived knowledge about TB was rated as 'little' or 'nothing' by 60% of respondents. The overall correct response score was 61%, with 55% correct response to queries related to etiology, 53% for identification of high-risk populations, 57% for possible routes of transmission, 89% for symptoms, and 49% for treatment. Males, those with annual incomes >\$20000, and individuals 51-70 years old had the highest scores.

In this high-risk inner-city population surveyed, knowledge deficits in the etiology, transmission, and treatment of TB were identified.

KEY WORDS: SOCIAL AWARENESS; USA.

**190**

- AU: Sophia Vijay, Krishna Murthy MS & Srikantaramu N  
TI: Fate of pulmonary tuberculosis patients diagnosed in a prevalence survey – A socio-epidemiological follow up after five years  
SO: INDIAN J TB 1998, 45, 199-205.  
DT: Per  
AB: The study group constitutes 86 'cases' and 341 'suspects' diagnosed in a TB prevalence survey. The area of the survey was under cover of the NTP for more than 20 years. The observed fate of these cases after five year was: dead 58.3%, culture negative 30% and culture positive 11.7%. Comparison of these rates with age standardised rates of 'cases' followed up after 5 years in an adjacent area, where control measures were not undertaken revealed that both these rates were not statistically different. The findings suggest that the same natural dynamics of TB as observed under the non-intervention situation, obtained in the study area as well, despite the latter being under the cover of NTP for so long.



Suspects, epidemiologically, proved to be a low priority group as the breakdown rate observed among them over five years was as low as 3.3%, again similar to the findings in the non-intervention area of a longitudinal survey.

A sociological enquiry revealed that cardinal symptoms of TB persisted even after five years in 65% of cases and 55% of suspects. Action taking behaviour indicated that more than half the patients, reported to GHS for remedial measures, while none of the 'asymptomatics' approached any health centre. These findings suggest that 'symptoms' are the driving force for patients to seek medical advice and the NTP still has the potential to bring these self-reporting cases within its network.

KEY WORDS: SOCIAL ACTION; SOCIO-EPIDEMIOLOGY; SOCIAL INQUIRY; INDIA

## 191

AU: Thilakavathi S, Nirupama C, Rani B, Balambal R, Sundaram V, Sudha Ganapathy & Prabhakar R

TI: Knowledge of tuberculosis in a south Indian rural community, initially and after health education

SO: INDIAN J TB 1999, 46, 251-54

DT: Per

AB : Case finding under the NTP in India is a passive process limited to chest symptomatics in the community who attend government health institutions on their own for relief of symptoms. It is, therefore, essential that the community is aware of the basic facts about TB. This study was undertaken in 24 randomly selected villages of Sri Perumbudur (Tq), Chengai Anna (Dist) Tamil Nadu to assess the initial level of knowledge about TB and again after providing health education on TB to evaluate its effectiveness after 2 years. Every fifth household starting from randomly chosen location was visited by Medical Social Worker (MSW) and a total of 466 respondents were interviewed. The head of the household or in his or her absence any other responsible family member was interviewed to find out the initial level of knowledge of TB using a pre-tested semi-structured interview schedule. The community was then educated about the important aspects of TB by means of pamphlets, film shows, exhibitions, role plays and group discussions. After two years, in the same households, 433 (93%) respondents were interviewed using the same interview schedule.

Two-thirds of the respondents were females and half of them were in the age group of 25-45 years. As regards literacy status, 53% were illiterates. There was an overall increase of knowledge on various aspects of TB, ranging from 18-58%. In all, 45% respondents initially and 91% after health education answered correctly that both rich and poor are affected by TB, 38% initially were aware that both adults and children are affected by TB and afterwards 93% were aware of these facts. Prior to health education, 37% knew prevalence of TB is similar in urban and rural areas, this increased to 95% after health education. Regarding knowledge that investigation and treatment facilities are available free of cost at Govt. Health Institutions 67% to begin with and almost all 98% afterwards

responded correctly. About the need of examining the close family members of TB patients, 67% were initially aware and after health education, it increased to 98%. Further 15% were aware of cough hygiene prior to health education, which increased to 48% subsequently.

As regards the source of information on TB, 70% mentioned verbal communication, i.e., through TB patients and others, as the major source followed by pamphlets (21%), mass media (14%) and others (15%).

It is necessary to consider the type of community and the available resources while planning health education strategies. For health education to be effective, and sustained, it should be a continuous process.

**KEY WORDS: SOCIAL AWARENESS; HEALTH EDUCATION; INDIA.**

**192**

**AU:** Hadley M & Mather D

**TI:** Community involvement in tuberculosis control : lessons from other health care programmes

**SO:** INTL J TB & LUNG DIS 2000, 4, 401-408

**DT:** Per

**AB:** Decentralising TB control measures beyond health facilities by harnessing the contribution of the community could increase access to effective TB care. This review of community-based health care initiatives in developing countries gives examples of the lessons for community contribution to TB control learned from health care programmes. Sources of information were Medline and Popline databases and discussions with community health experts. Barriers to success in TB control stem from biomedical, social and political factors. Lessons are relevant to the issues of limited awareness of TB and the benefits of treatment, stigma, restricted access to drugs, case finding and motivation to continue treatment.

The experience of other programmes suggests potential for an expansion of both formal and informal community involvement in TB control. Informal community involvement includes delivery of messages to encourage TB suspects to come forward for treatment and established TB patients to continue treatment. A wide range of community members provide psychological and logistic support to patients to complete their treatment. Lessons from formal community involvement indicate that programmes should focus on ensuring that treatment is accessible. This activity could be combined with a variety of complementary activities: disseminating messages to increase awareness and promote adherence, tracing patients who interrupt treatment, recognising adverse effects, and case detection.

Programmes should generally take heed of existing political and cultural structures in planning community-based TB control programmes. Political support, the support of health professionals and the community are vital, and planning must involve or stem from the patients themselves.

KEY WORDS: COMMUNITY PARTICIPATION; DEVELOPING COUNTRIES; UK.

No. of Records: 16