

Perception about Health and Disease

Syed Arshad Sabir* and Nadeem Ikram**

*Department of Community Medicine, Rawalpindi Medical College, Rawalpindi.

** Department of Pathology, Rawalpindi Medical College, Rawalpindi

Abstract

Background: To assess peoples' general concepts about health and disease and basis of disease occurrence in man in an objective way.

Methods: It was an observational descriptive study. Perceptions of the attendants (n=110) of the patients who approached a public sector tertiary care hospital in Rawalpindi were assessed through a questionnaire by interviewer-administered technique. Their concepts about health and disease were explored by open-ended questions and their understanding of ways of disease causation evaluated six sets of closed ended options.

Results: Of the total study participants (n=110), with mean age 36 Years, 58% were males and 42% were females. Majority were married (71%), of lower economic status (45%), and rural area (70%). Education in 51% was above 10years of schooling. In 36% subjects concept of health and in 25% concept of disease was scientifically appropriate at their level. On average 66.3% of the respondents had concept of scientific basis of disease. causation while 33.6% did not hold scientifically sound concepts. In set-IV majority believed in that disease may result as punishment from God but this belief was significantly high in females (X²cal= 8.1, P<0.005).

Conclusion: Though people understandings in matter of health are not optimum but it is promising within their socioeconomic capacity. Efforts are needed to promote health literacy among masses beyond the conventional mode. Care providers should respect their beliefs while interacting with patients.

Key words: Health literacy, perceptions of health and disease, disease causation knowledge

Introduction

Health has been defined as the state of complete physical, mental and social well being and not merely an absence of disease and infirmity. Similarly, disease is not a static entity but in fact a process that begins before man's health is affected by an etiological agent in the environment. Webster's dictionary has defined disease as a condition in which body health is impaired¹. Disease is rarely caused by a single agent alone; rather it is attributed to multiple factors. Before the discovery of microscopic life various

concepts of disease causation were in vogue e.g. the supernatural theory of disease, theory of humors', miasmatic theory and theory of contagion etc. A basic component of health system is "concepts" that include people concepts about health and disease². It is how people think about health and disease; how they behave in matters of health. Healthy People 2010 Initiative USA has defined Health literacy as "the degree to which the people have capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions"³. Despite mass awareness about cellular, molecular and pathological basis of diseases, people all over the world still have firm belief in conventional concepts of health and disease. A study among Mexican people concluded that gender point of view, respect for religious beliefs and emotional control must be an integral part of health educational practice⁴. A cross sectional study by Volkers et al suggested that occupational position of the workers at their work place and their education has combined effect on self-perceived health which emphasizes the need to improve the conceptual framework of health disparities⁵. A study on myths about diabetes mellitus among non-diabetics attending primary health care centers of Karachi revealed these were frequently reported among patients especially among males and their belief in spiritual treatment of disease. Moreover, misconceptions were found to be higher among illiterates⁶. The present study was intended to evaluate the general concepts of people about health and disease and explore their opinions regarding basis of disease occurrence.

Subjects and Methods

This observational descriptive study was carried out from June to August 2009. Study population comprised "attendants" of the patients who were admitted in various departments or attended OPD of Rawalpindi Medical College and Allied Hospitals. A total of 110 attendants were included in the study by convenience sampling. Data was gathered by using a structured questionnaire containing open and close-ended questions by interviewer-administered method. Information on gender, educational status, profession, living place, and concept about health and disease was gathered. In order to obtain their perception about disease causation in humans in an explicit and objective way their concepts were explored under six sets of

possible explanations, one scientific and the other a misconception in each set. Respondents were asked to decide one most appropriate explanation in their opinion in each category/set. Attendants of the patients in critical conditions were excluded. An informed consent was taken by all intended respondents. Data was analyzed using SPSS version 13.0 and Microsoft Excel 2003.

Results

Of the total study participants (n=110), 64 were males and 46 were females. Mean age of the respondents was found to be 36.4 years±2.33 (95%CI 34.1-38.7). Among study subjects, 70% belonged to urban regions while 30% were residing in rural areas of Rawalpindi. Marital status of the respondents was 78 married, 31 unmarried and 01 separated. Majority of the study participants (50) were daily-wages workers/small shopkeepers/street hawkers etc, followed by house wives (26), teachers (16), and students (09) and business men (09). Approximately half of the respondents (50.9%) had 10 years of schooling and above while 49.1% got education below 10 years of schooling. Gender break-up of the educational status was also done (Fig.1). In present study, 107 study participants believed that people may fall ill during their life time while 3 respondents denied. Concept of the study subjects about “health” was found to be extremely diverse.

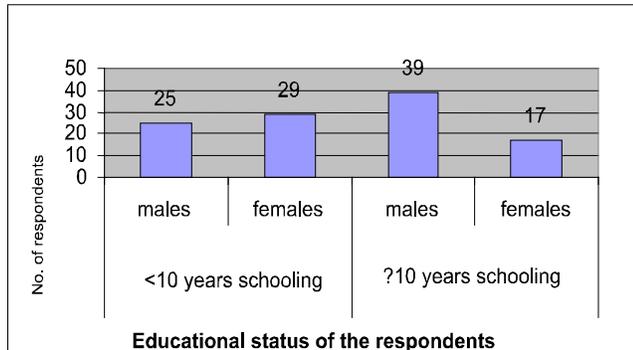


Fig. 1. Educational status of respondents (n=110)

Most of the respondents (63) claimed that health is associated only with physical fitness while only 7 study subjects expressed that only mental fitness is the domain on the basis of which any person can be declared as healthy. However, in the opinion of 40 (36%) study participants (24 male and 16 female) health includes both physical and mental aspects. Similarly, perception of the respondents about “disease” had great disparity (Fig.2). On average 73 (66.3%) of the respondents had concept of scientific basis of disease. causation while 37 (33.6%) did not hold scientifically sound concepts. Their responses as

such and in relation to their gender, living place and educational status were analyzed and are depicted in Table.1

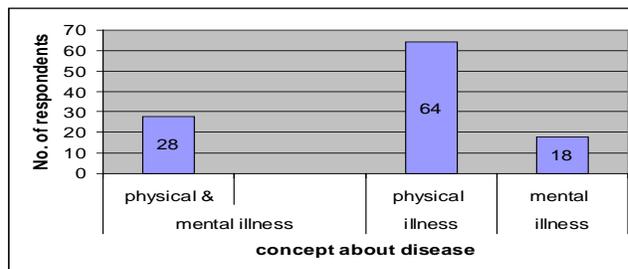


Fig 2. Disease perception of respondents (n=110)

Discussion

In our study, most of the respondents (58.2%) considered only those people to be diseased who have had any physical disorder while 25.4% study participants expressed that both physical and mental well being of an individual are affected while suffering from disease and 16.3% declared disease only a mental anguish. Similarly, divergence was also observed in the views of the study subjects regarding health. Regarding concepts about disease, majority (57.3%) claimed physical fitness the landmark of health. In the opinion of 36.4% respondents both physical and mental dimensions of health were required to declare a person healthy and among these 60% were male. This shows more clarification of views among males as compared to females. These results might be due to high proportion of male respondents in the study and also the high ≥ 10 years school literacy in males (69.6%). Only 6.4% respondents expressed that only mental aspect of health must be subjected to evaluation for analyzing the health status of an individual. A study carried out among Mexican adult population revealed their health concept included physical, emotional and spiritual aspects while their concept about disease included biological and social dimensions^{2and 7}. Reason for this much variation in the concepts might be their regional, cultural and social background. In current study, place of living (urban / rural) of the respondents had no statistically significant association with their beliefs concerning disease causation in all the 6 sets. While scrutinizing the views about disease causation, males were found to have firm belief in correct options in the all the six sets of basis of disease explanations than options with no scientific evidence. However, 97.8% females

enrolled in the study believed that mental worries and stresses usually lead towards disease / ill health. This may be indirect reflection of psychological experiences of women studied. No statistically significant differences were observed concerning the ways of disease causation among males and females in explanations But in case of set IV explanations of disease causation statistically significant difference among males and females were found (Table.1). Majority in both gender strata believed that disease

may result as punishment from God but this belief was significantly high in females ($X^2_{cal}= 8.1, P<0.005$). This finding was due to religion impact which obviously play a major role in formulating women attitudes. Education imparts better understanding of faith as well. In this study educational status showed statistically significant association with scientifically correct concepts of the respondents in Set I, II and IV.(Table.2).

Table1. Perceptions of the respondents about ways of disease causation in humans in relation to their Gender, Living place and Educational attributes (n=110).

S. No	A. Possible and alternative ways of disease causation in humans (Scientific explanations)	Respondents agreed (perceptions) under their different attributes [in actual numbers].						B. Possible and alternative ways of disease causation in humans (Common Misconception)	Respondents agreed (perceptions) under their different attributes [in actual numbers]						
		Gender		Living place		*Edu. Status			Gender		Living place		*Edu. Status		
		M	F	U	R	≤10y	>10y		M	F	U	R	≤10y	>10y	
Set-I	Due to entry of disease producing micro-organisms / germs in the body	47	33	55	25	35	46	Due to eating of Bhadie / hot / cold foods	17	13	22	08	19	10	
Set-II	Due to exposure to noxious environmental factor like polluted water/ food/ air etc	51	36	63	24	37	50	Due to witch crafts, charms, amulets etc	13	10	14	09	17	06	
Set-III	Due to inheritance of genetic defects	38	27	50	15	30	35	Disease may occur spontaneously without any reason	26	19	27	18	24	21	
Set-IV	Due to accidents/ injury/ fall or mechanical force etc	31	10	32	09	15	26	Due to punishment from God	33	36	45	24	39	30	
Set-V	Due to mental worries and stresses	56	45	73	28	50	51	Due to entry of evil spirits / Gin in the body	08	01	04	05	4	5	
Set-VI	Due to unhealthy lifestyle , no balanced diet, lack of self care etc	37	25	44	18	25	37	Due to bad eye or "Nazar" of some other person	27	21	33	15	28	20	
Average of all sets in No. and Percentage = 73, 66.36%								Average of all sets in No. and Percentage = 37, 33.6%							

M = Male, F = Female, U= Urban, R=Rural,* Educational Status in years of schooling

Table 2: Educational status towards disease causation concepts of the respondents in Explanations Set-I, II and IV. (n=110)

Educational status	Set I. Explanation of disease causation		Set II. Explanation of disease causation		Set IV. Explanation of disease causation	
	Option i	Option ii	Option i	Option ii	Option i	Option ii
	Due to disease producing microorganisms	Due to *bhadie / hot/ cold foods	Due to polluted water, food, air	Due to witchcrafts, charms, amulet	Due to accidents/ injury/ fall	Due to punishment from God
≥10y schooling	46	10	51	05	27	29
<10y schooling	35	19	39	15	15	39
X²cal= 4.24 P<0.05		X²cal= 6.52 P<0.02		X²cal= 4.82 P<0.05		

*common misconceptions about characteristics of certain foods as a cause of disease.

In present study, respondents with higher educational status were found to hold scientifically correct explanations of disease. Causation in all the six sets Health education regarding oral rehydration therapy among mothers of Multan brought about positive change in their behaviour with respect to sanitation and cleanliness and substantially reduced the incidence of diarrhea⁸. In Pakistan, people have various myths and misconcepts about diseases occurrence and apply irrational, sometime rather harmful measures/ *desi totka* for relief. Such misconceptions strongly influence the health seeking behaviour of the individuals. In present study, 12.5% males claimed that diseases occur due to the entry of evil spirits in the body. Despite knowing the biological basis of disease, cultural and spiritual issues pertaining to disease still exist in our society. A study carried out among adult population of Karachi showed that spiritual treatment was considered to be the most effective treatment by 33.1% respondents⁹. A similar study by Qidwai et al among family practice patients in Karachi revealed prayers for healing were practiced by 97.5% respondents¹⁰. A study by Eilola et al revealed diseases stringently related with the personality of the patients and considered as the effect outcome of personality¹¹.

In this study, 72.72% respondents with almost equal gender distribution had faith in genetics as the cause of disease. Although socioeconomic and environmental factors are important determinants of health, but in the absence of these factors genotype of an individual must be given due consideration to evaluate the disease process¹². Congolese people believe that they do not die by microbes and they consider witchcrafts as a cause of illness among them¹³. Even the youngsters have trust in traditional beliefs regarding management of health disorders. A study among South African adolescents age 12-14 years suggested that health education interventions can be strengthened by taking into consideration traditional and religious beliefs of the people apart from medical impression of disease¹⁴.

In conclusion, concepts of the people about health and disease are not optimum but most hold

rational understanding of basis of disease occurrence. Intensified efforts are needed to promote health literacy among masses beyond the conventional mode. Sociocultural and religious beliefs of the patients must be considered while treating them.

References

1. Iliyas M. Definitions and Background Information. Community Medicine and Public Health. 5th ed. Karachi: Time Publishers; 2000:5.
2. Park K. Concept of Health and Disease. Park's Textbook of Preventive and Social Medicine. 18th ed. India: Banarsidas Bhanot; 2007: 29.
3. Robert B. Wallace. Health Literacy. Maxy-Rosenau-Last Public Health and Preventive Medicine. 15th Edition. USA: McGraw-Hill companies; 2008:1035. USA
4. Torres Lopez TM, Munguia Cortes JA, Pozos Radillo BE, Aguilera Velasco MD. Social Representations on the health and disease of an adult population from Guadalajara, Mexico. Aten Primaria 2009 14: 78
5. Volkens AC, Westert GP, Schellevis FG. Health disparities by occupation, modified by education: a cross-sectional population study. BMC Public Health 2007 8; 7: 196.
6. Nisar N, Khan IA, Qadri MH, Sher SA. Myths about Diabetes Mellitus among non-diabetic individuals attending primary health care centers of Karachi suburbs. JCPSF 2007; 17(7): 398-401.
7. H Annett, Nickson PJ. Community involvement in health: why is it necessary? Tropical Doctor 1991; 21(1): 3.
8. Rabbani W, Quddusi AI, Mustafa S. Prevention of diarrhea; the role of health education. Professional Med J 2007; 14(3): 416-21.
9. Shafiq M, Tanvir M, Tariq A, Kasi P, Zafar M, Saleem A; et al. Epilepsy: Public knowledge and attitude in a slum area of Karachi, Pakistan. Seizure; 16(4): 330-37.
10. Qidwai W, Tabassum R, Hanif R, Khan FH. Belief in prayers and its role in healing among family practice patients visiting a teaching hospital in Karachi, Pakistan. Pak J Med Sci 2009; 25(2): 182-09.
11. Eilola J. Moral Transgression and illness in the Early Modern North. Asclepio 2009; 61(1): 219-42.
12. Last MR. Genetic Determinants of disease and genetics in public health. In: Fred Lorey (edi). Public Health and Preventive Medicine. 15th ed. New York: Mc Graw Hill; 2008: 63.
13. Sabuni LP. Dilemma with the local perception of causes of illnesses in central Africa: muted concept but prevalent in everyday life. Qual Health Res 2007; 17(9): 1280-91.
14. Ragnarsson A, Onya HE, Aaro LE. Young people's understanding of HIV: a qualitative study among school students in Mankweng, South Africa. Scand J Public Health 2009; 37(2): 101-06.