

BELIEFS ABOUT CAUSATION AND TREATMENT OF DISEASES AMONG ADULTS IN A RURAL AREA OF PONDICHERRY

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ARTICLE INFO

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Key words: Belief, Disease,
Leprosy, Epilepsy, Chickenpox

ABSTRACT

Background: Majority of the rural people believe that wrath of gods and goddesses, evil eye, spirit or ghost intrusion are supposed to be the cause of diseases. Study was conducted to understand the beliefs about cause and treatment of some diseases among the adult population of a rural area of Pondicherry.

Materials and methods: A cross sectional study was conducted at Manapet, Pondicherry. A pre-tested semi-structured questionnaire was used to interview 339 adult individuals.

The questionnaire included three parts socio-demographic characteristics, selected beliefs about concept of causation of diseases and treatment practices. The data collected were analyzed using Microsoft excel software. Simple proportions (%) and chi square test were used.

Results: About causation of disease most common belief was "evil eye can cause disease" (52.2%), while about treatment most common belief was "by holding keys in hands by patient, epileptic attack can be stopped" (78.5%). Beliefs which were significantly more among illiterates were: chicken pox is due to wrath of god/goddess, evil eye as a cause of disease, leprosy and tuberculosis are due to past sins.

Conclusion: Most of the myths were higher among illiterates, with some having significant difference between literates and illiterates.

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INTRODUCTION

Beliefs about health and diseases are passed from one generation to another. People, whether rural or urban, have their own beliefs and practices about causes and management of various diseases. Not all customs and beliefs are bad. Some are based on centuries of trial and error and have positive values, while others may be useless or harmful.¹ Public health communication is successful only if the interaction between the sender (doctor or health worker) and receiver (patient) by exchanging the information rather than simply transmitting information.² If the doctor understands the patient's health beliefs regarding their illness and treatment, they can incorporate this knowledge into their treatment to improve health outcomes.³

Majority of the rural people believe that wrath of gods and goddesses, evil eye, spirit or ghost intrusion are supposed to be the cause of diseases. Application of kajal to ward off evil eye is still a practice, going on. In spite of the rapid developing modern science, people still have false beliefs. As information about these factors i.e. customs, habits, beliefs and superstitions is still lacking, we planned a study to understand the beliefs about causes and

treatment of some diseases among the adult population of a rural area of Pondicherry.

MATERIALS AND METHODS

Present study was conducted by the Department of Community Medicine at a Private Medical College in Pondicherry during year 2009. A cross sectional study was planned to see the beliefs about health and disease in Rural Pondicherry. The study was conducted in Manapet village, field practice area of rural health centre, Manapet, of department of community medicine. For the present study, specific beliefs were selected about causes and treatment of diseases. A pre-tested semi-structured questionnaire was used to interview 339 adult individuals. The questionnaire was translated from English to Tamil with the help of Tamil language expert and then back translated into English by another expert of public health. House to house survey of whole village was done to collect the information. From each house one adult was selected randomly for the interview. Before interview the participant was informed about the purpose of the study and consent was obtained.

The questionnaire included three parts socio-demographic characteristics, selected beliefs about concept of causation of diseases and treatment practices. After orientation, interns collected the data during their Community Medicine posting. The data collected were analyzed using Microsoft excel software. Simple proportions (%) and chi square test were used. P value of less than 0.05 was considered significant.

RESULTS

There were total 339 participants. Out of these 121(35.7%) were male. Most of the participants (39.2%) belonged to age group 46 years and above. Out of 339 respondents, 44.2% belonged to Socio-Economic Class V, only 1.8% were in Class I. Overall most common occupation was housewife (37.8%). Among male participants most common occupation (50.4%) was farmer while out of 218 females 128 (58.7%) were housewives. There were total 136 (40.1%) illiterate and 203(59.9%) literate participants in our study. (Table 1)

Most common belief was “evil eye can cause disease” (52.2%). We compared beliefs between literates and illiterates. Some common beliefs about disease causation which were significantly more among illiterates were: chicken pox is due to wrath of god/goddess, evil eye as a cause of disease, leprosy is due to past sins and tuberculosis is due to past sins.(Table 2)

Most common belief about treatment was: by holding keys in hands by patient, epileptic attack can be stopped(78.5%).This belief was significantly more among illiterates(86%). Another belief “evening colic in infants is relieved by introducing a tamarind twig in anus” was also more common among illiterates(51.5%).(Table3)

Table 1: Socio-demographic characteristics of study participants

Variable	No. (%)	
Age group (yr)	<25	35(10.3)
	25 – 32	83(24.5)
	32 – 39	50(14.7)
	39 – 46	38(11.2)
	≥46	133(39.2)
Sex	Male	121(35.7)
	Female	218(64.3)
Socioeconomic status (Modified Prasad’s Classification)	Class I	6(1.8)
	Class II	24(7.1)
	Class III	52(15.3)
	Class IV	107(31.6)
	Class V	150(44.2)
Occupation	House wife	128(37.8)
	Farmer	113(33.3)
	Labourer	72(21.2)
	Others	26(7.7)
Literacy	Illiterate	136(40.1)
	Literate	203(59.9)

Table 2: Beliefs about causes of disease among Illiterates and Literates

Belief	Illiterates (n=136)	Literates (n=203)	Total (n=339)	p value
	No. (%)	No. (%)	No. (%)	
Skin diseases are due to impure blood	69(50.7)	92(45.3)	161(47.5)	0.386
Bad deeds in previous life of parents results in mental retardation of child	67(49.2)	77(37.9)	144(42.5)	0.050
Chicken pox is due to wrath of god/goddess	74(54.4)	75(36.9)	149(43.9)	0.002
Leprosy is due to past sins	45(33.1)	42(20.7)	87(25.7)	0.015
Tuberculosis is due to past sins	47(34.6)	45(22.2)	92(27.1)	0.017
Evil eye can cause disease	89(65.4)	88(43.4)	177(52.2)	0.0001

Epilepsy is due to bad spirit/ghost intrusion	40(29.4)	44(21.7)	84(24.8)	0.880
Hysteria is due to bad	40(29.4)	46(22.7)	86(25.4)	0.203

Table 3: Beliefs about treatment among Illiterates and Literates

Belief	Illiterates (n=136)	Literates (n=203)	Total (n=339)	P value
	No. (%)	No. (%)	No. (%)	
By holding keys in hands by patient, epileptic attack can be stopped	117(86)	149(73.4)	266(78.5)	0.008
Smell of the socks and shoes can stop the epileptic attack	18(13.2)	22(10.8)	40(11.8)	0.617
Evening colic in infants is relieved by introducing a tamarind twig in anus	70(51.5)	74(36.5)	144(42.5)	0.009
Infant diseases can be cured by feeding milk mixed with donkey’s blood	26(19.1)	35(17.2)	61(18)	0.764

DISCUSSION

The manner in which people perceive their disease and its treatment determines their health-seeking behavior.⁴ As literacy is an important determinant for health and disease we compared the various beliefs between illiterates and literates in our study. Common beliefs which were not significantly different between literates and illiterates were “Bad deeds in previous life of parents results in mental retardation of child” and “Skin diseases are due to impure blood” while other beliefs which were common and differed according to literacy level were “Evil eye can cause disease” and “Chicken pox is due to wrath of god/goddess”.

The belief that mental illness is incurable or self-inflicted can lead to inadequate treatment or no treatment.⁵ Such beliefs prevent people from seeking health care. In our study 42.5% respondents said that mental disorders are related with past sins, similar to this Kishore J⁶ also reported that 39.4% of rural respondents believed that mental illness is the punishment given to patients by god for their past sins. In same study by Kishore J⁶ it was found that majority of subjects had belief that prayer or pooja or hawan can reduce the bad effects and that ghost can be removed by tantriks/ojha for mental disorders.

Although literacy level is improved in India, there is still many false beliefs about epilepsy.

Epilepsy is a chronic brain disorder characterized by recurrent derangement of the nervous system due to sudden excessive disorderly discharge of the cerebral neurons. The discharge results in almost instantaneous disturbance of sensation, loss of consciousness , convulsive movements or some combination of these.⁷ In our study 24.8% persons believed that evil spirits can cause epilepsy, while in a study by M Kabir et al.⁸in Nigeria, possession by evil spirits was a main cause (16.3%) among the perceived causes of epilepsy. In India chicken pox is considered to be wrath of a goddess. So the goddess is appeased with prayer and offerings. In our study, the belief that chicken pox is due to wrath of god was seen more commonly among illiterates (54.4 %) compared to literates. It shows that education is having some effect on knowledge about cause of chicken pox. Leprosy is a chronic infectious disease that causes disability if remained untreated. There is a common belief that leprosy is due to past sins and *karma*. In our study, it was observed that

25.7% had belief that leprosy is caused by past sins, which was lower compared to the finding in a study by Singh SB et al.⁹ in Chandigarh, where past sin was considered as a cause by 64.9% of the respondents. This difference may be due to the higher literacy level of Pondicherry. Among illiterates 33.1% had the belief of past sins compared to 20.7% literates in our study.

About the false belief "managing the attack of an epileptic by giving keys in the hands of the patient", 86% illiterates and 73.4% literates believed that it is true. In our study 11.8% respondents said that during epilepsy attack patient should smell a shoe while in a study by Joshi HS et al.¹⁰, 22.7% respondents said that during epilepsy attack patient should smell a shoe.

Another common myth was about the treatment of evening colic in infants by introducing a tamarind twig in anus, it is a harmful practice as it can cause injury and infection. It was more common in illiterates (51.5%) as compared to literates (36.5%).

CONCLUSION

Most of the myths were higher among illiterates, with some having significant difference between literates and illiterates. Most common myth was "by holding keys in hands by patient, epileptic attack can be stopped". Our study showed that most of villagers are lacking the knowledge about causes and treatment of diseases. Health education strategies can be planned based on the study, to remove the false beliefs.

REFERENCES

1. Park K. Park's Textbook of Preventive and Social Medicine. 19th ed. Jabalpur; Banarsidas Bhanot; 2007.

2. Lee, R. G., & Garvin, T. Moving from information transfer to information exchange in health and health care. *Social Science & Medicine*, 56, 2003; 449-464.

3. Boot, C.R.L., Meijman, F.J., Dulmen, S. van. Beliefs about the causes of health complaints: a study in primary care. *Health Communication*: 2009, 24(4), 346-350.

4. Tipping G, Segall M (1995). Healthcare seeking behaviour in developing countries: An annotated bibliography and literature review. *Development Bibliography* 12. Institute of Development Studies, Sussex University; 21.

5. Kishore J. Schizophrenia: Myths and reality. *Rationalist Voice* 2004. p. 23-6

6. Kishore J, Gupta A, Jiloha RC, Bantman P. Myths, beliefs and perceptions about mental disorders and health-seeking behavior in Delhi, India. *Indian J Psychiatry* 2011; 53:324-9.

7. Behrman RE, Kleigman RM, Jensen HB. Nelson's textbook of pediatrics. Saunders, New York, 1987; 1813

8. Kabir M, Iliyasu Z, Abubakar IS, Kabir ZS, Farinyaro AU. Knowledge, attitude and beliefs about epilepsy among adults in a northern Nigerian urban Community. *Annals of African Medicine* Vol. 4, No. 3; 2005: 107-112.

9. Sukhbir Singh, Anil K Sinha, BG Banerjee, Nidhi Jaswal. Knowledge, Beliefs and Perception of Leprosy. Disability, CBR and Inclusive Development 2012; Vol 23, No. 4

10. Joshi HS, Syed Esam Mahmood, Bamel A, Agarwal AK, Iram Shaifali. Perception of epilepsy among the urban secondary school children of Bareilly district. *Ann Indian Acad Neurol*. 2012 Apr-Jun; 15(2): 125-127.