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A Comparative Study of Beliefs, Attitudes and Behaviour of Psychiatric Patients and their Care givers with Regards to Magico-religious and Supernatural Influences

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Help seeking pathway of individuals suffering from mental disorders is affected by their beliefs and attitudes towards various sociocultural and environmental factors relevant to these disorders. The current study aimed at exploration of correlation between attitudes and beliefs of patients seeking help from psychiatry out-patient department and their care givers for role of magico-religious and supernatural influences in mental disorders. The study was carried out at the out-patient psychiatry department of a tertiary care multispecialty hospital. Following inclusion in the study, the patients and care givers were assessed for demographic variables. Subsequently, they were assessed for their attitudes, belief and behaviour with regards to magico-religious and supernatural influences in context of mental disorders. Correlation between various domains of Supernatural Attitude Questionnaire (SAQ) was carried out using Pearson's correlation coefficient. The study sample comprised of 44 (45%) female and 54 (55%) male care givers. Forty six percent of care givers reported belief in magico-religious and supernatural influences. Sixty one percent of care givers had favorable attitude towards magico-religious and supernatural influences as cause of mental illness. Male and female care givers did not differ significantly on any of the domains of SAQ. Help seeking behaviour of care givers with regards to magico-religious and supernatural influences was more strongly correlated with the attitudes of the care givers towards causal role of these influences in mental disorders. There is a positive correlation between beliefs, attitudes and behaviour of psychiatric patients and their care givers with regards to magico-religious beliefs and supernatural factors.

Key words: Magico-religious beliefs, supernatural factors, mental disorders, socio-cultural factors, help seeking pathway

INTRODUCTION

Help seeking pathway of individuals suffering from mental disorders is affected by their beliefs and attitudes towards various sociocultural and environmental factors relevant to these disorders (Phillips *et al.*, 2000). Patients' and care givers' beliefs and attitudes towards role of various factors in causation and treatment in mental disorders shape their help seeking behaviour. Beliefs prevalent in a particular culture concerning various supernatural influences operating in the environment are labelled as magico-religious (Kulhara *et al.*, 2000). Relatives' causal attribution for mental disorders to various magico-religious and supernatural influences have been studied earlier. Most of these studies have focused on psychotic disorders including schizophrenia (Vlachos *et al.*, 1997; Kulhara *et al.*, 2000; Kurihara *et al.*, 2006; Huang *et al.*, 2011). Exploration of attribution for various psychotic features in these disorders has contributed to this interest (Huang *et al.*, 2011).

Although, limited to a few reports, association of magico-religious and supernatural beliefs and non-psychotic psychiatric disorders has also been reported (Taieb *et al.*, 2006). There are no published reports on correlation between magico-religious and supernatural beliefs and attitudes among patients attending psychiatry out-patient department and their care givers. A comparative research on this issue is likely to provide important insight in to the attribution pattern of the patients and the care givers. This, in turn, would help to understand the help seeking behaviour of these individuals.

Mental disorders continue to be viewed as "nonmedical diseases" that are caused by an invisible and abstract element in many cultures (Thong *et al.*, 1992). Similarly, a significant proportion of population continues to seek help from traditional healers in their populations (Fasola, 2006; Mafimisebi and Oguntade, 2010). Additionally, family continues to play a significant role in care in these cultures and societies (Yip, 2005; Avasthi, 2010). Consequently attitudes and beliefs of family members are likely to influence help seeking of these patients. Hence, it is important to assess attitudes and beliefs of both psychiatric patients and their primary care givers.

The current study aimed at exploration of correlation between attitudes and beliefs of patients seeking help from psychiatry out-patient department and their care givers for role of magico-religious and supernatural influences in mental disorders. Also, it explored correlation between the help seeking behaviour of the patients and their care givers for magico-religious and supernatural influences.

MATERIALS AND METHODS

Setting and patient selection: The study was carried out over a three month period from October-December 2011. The study was carried out at the Out-patient Psychiatry Department of a tertiary care multispecialty hospital. All the patients seeking consultation at the department during the data collection period constituted the sampling frame. We included consecutive patients meeting the inclusion criteria in the current study. To be eligible for participation in the study the patient had to be accompanied by the primary care giver. Primary care giver was an individual who fulfilled any three of the following criteria: (1) parent/spouse of the patient, (2) has most frequent contact with the patient and (3) helps to support the family financially, has most frequently been a participant in the treatment of the patient; is to be contacted by the treatment staff in case of an emergency. All consecutive adult patients (aged 18-60 years), irrespective of the nature of presenting complaints were included in the study. Those unwilling to participate or refusing the informed consent were excluded from the study. We aimed at recruiting 100 subjects and care givers.

Study questionnaire: Following inclusion in the study, the patients and care givers were assessed for demographic variables. Subsequently, they were assessed for their attitudes, belief and behaviour with regards to magico-religious and supernatural influences in context of mental disorders.

The assessment was carried out using Supernatural Attitude Questionnaire (SAQ). It is a twenty eight item questionnaire developed by Kulhara *et al.* (2000). The questionnaire inquired into the care givers' attitudes and belief in various types of magico-religious and supernatural influences (4 items), the role of such influences in causing mental illness or behavioural abnormalities in general (7 items) and their own patient (5 items) and help seeking based on such attitudes and beliefs (3 items). Also, it explored the attitudes and beliefs of patient towards these magico-religious and supernatural influences (7 items). Additionally, it explored the help seeking behaviour of patient based on these attitudes and beliefs (2 items). Supernatural beliefs about disease causation have been grouped as fate, mystical retribution and magical causation (Murdock *et al.*, 1980). SAQ makes use of colloquial terms which are easily recognised by respondents.

Data analysis: The data were analysed using SPSS ver 17.0. Descriptive statistics were used to analyse the demographic variables. In between group differences were carried out between male and female care givers for

the various domains of SAQ using independent sample t-test. Correlation between various domains of SAQ was carried out using Pearson's correlation coefficient. Additionally, the patients who sought help from faith healers for their illness were compared to those not seeking such help for various domains of SAQ using independent sample t-test. Level of statistical significance was kept at $p < 0.05$ for all tests.

Conditions of anonymity and confidentiality as specified in the institutional ethical guidelines were adhered to during the study.

RESULTS

A total of 100 consecutive patients and care givers attending the psychiatry out-patient department of the hospital were included in the study. Two patient-care giver dyads were excluded from as they did not answer the study questionnaire. A total of 98 patient-care giver dyads were included in the final analysis.

The study sample comprised of 44 (45%) female and 54 (55%) male care givers. The mean age of female care givers (36.95, $SD \pm 12.82$) and male care givers (34.04, $SD \pm 13.03$) was comparable ($t = 1.11, p = 0.27$). Most of the female care givers (68%) were home makers. Only 11% of male care givers were unemployed. A significantly higher proportion of male care givers were literate (88 vs. 61%, $\chi^2 = 10.22, df = 1, p = 0.001$).

Forty six percent of care givers reported belief in magico-religious and supernatural influences. Sixty one percent of care givers had favorable attitude towards magico-religious and supernatural influences as cause of mental illness. Around 23% of the patients volunteered to seek help from faith healer for their mental disorder. Around 32% of care givers consulted a faith healer on their own for patients' mental disorder. Similarly 35% of the care givers conducted some kind of ritual aimed at pleasing the supernatural influences to help the patient (Table 1).

Male and female care givers did not differ significantly on any of the domains of SAQ (Table 2). They were found to be comparable with regards to "belief of care givers in magico-religious and supernatural

influences" ($t = -1.10, p = 0.27$), "attitudes of care givers with regards to magico-religious and supernatural influences as cause of mental disorders" ($t = 1.06, p = 0.29$), "attitudes of care givers with regards to magico-religious and supernatural influences as cause of mental disorder of the patient" ($t = 0.05, p = 0.96$), "behaviour of care givers with regards to magico-religious and supernatural influences" ($t = -0.48, p = 0.63$) and "attitudes of patient towards magico-religious and supernatural influences" ($t = -0.55, p = 0.57$).

Help seeking behaviour of care givers with regards to magico-religious and supernatural influences was more strongly correlated with the attitudes of the care givers towards causal role of these influences in mental disorders in general ($r = 0.45, p < 0.001$) and specifically in their patient ($r = 0.41, p < 0.001$) as compared to their belief in existence of the magico-religious and supernatural influences ($r = 0.32, p = 0.001$). Similarly attitudes of patients were also positively correlated with the belief of care givers in existence of magico-religious and supernatural influences ($r = 0.32, p = 0.001$) and care givers' attitudes towards role of magico-religious and supernatural influences in causation of mental disorders in general ($r = 0.54, p < 0.001$) and care givers' attitudes towards role of magico-religious and supernatural influences in causation of mental disorders in their own patient ($r = 0.54, p < 0.001$).

Patients who were taken to a faith healer at their own request scored significantly higher on all domains of the SAQ as compared to the patients who did not make such a request (Table 3). They had a higher score for "belief of care givers in magico-religious and supernatural influences" ($t = -2.98, p = 0.004$), "attitudes of care givers with regards to magico-religious and supernatural influences as cause of mental disorders" ($t = -2.17, p = 0.032$), "attitudes of care givers with regards to magico-religious and supernatural influences as cause of mental disorder of the patient" ($t = -2.84, p = 0.005$), "help seeking behaviour of care givers with regards to magico-religious and supernatural influences" ($t = -4.95, p < 0.001$) and "attitudes of patient towards magico-religious and supernatural influences" ($t = -4.48, p < 0.001$).

Table 1: Frequency distribution of study participants for various domains assessed by supernatural attitude questionnaire (SAQ)

| SAQ | No. | % |
|--|-----|----|
| Care givers reported belief in magico-religious and supernatural influences | 44 | 46 |
| Care givers with favorable attitude towards magico-religious and supernatural influences as cause of mental illness | 59 | 61 |
| Care givers with favorable attitude towards magico-religious and supernatural influences as cause of mental illness of the patient | 32 | 34 |
| Help seeking by care givers from faith healers for mental illness in the patient | 53 | 55 |
| Patients with favorable attitude towards magico-religious and supernatural influences | 43 | 44 |
| Help seeking by patients from faith healers for their mental illness | 23 | 23 |

Table 2: Differences between male and female care givers on various domains assessed by supernatural attitude questionnaire (SAQ)

| SAQ | Gender | Mean | SD | t-value | p-value | 95% CI limit | |
|--|--------|------|------|---------|---------|--------------|-------|
| | | | | | | Lower | Upper |
| Belief of care givers in magico-religious and supernatural influences | F | 0.81 | 1.14 | -1.10 | 0.27 | -0.76 | 0.21 |
| | M | 1.09 | 1.27 | | | | |
| Attitudes of care givers with regards to magico-religious and supernatural influences as cause of mental disorders | F | 2.43 | 2.52 | 1.06 | 0.29 | -0.45 | 1.50 |
| | M | 1.90 | 2.34 | | | | |
| Attitudes of care givers with regards to magico-religious and supernatural influences as cause of mental disorder of the patient | F | 0.88 | 1.49 | 0.05 | 0.96 | -0.61 | 0.64 |
| | M | 0.87 | 1.60 | | | | |
| Behavior of care givers with regards to magico-religious and supernatural influences | F | 0.86 | 1.06 | -0.48 | 0.63 | -0.50 | 0.31 |
| | M | 0.96 | 0.97 | | | | |
| Attitudes of patient towards magico-religious and supernatural influences | F | 1.50 | 2.28 | -0.55 | 0.57 | -1.26 | 0.70 |
| | M | 1.77 | 2.57 | | | | |

F: Female, M: Male

Table 3: Differences between patients seeking help from faith healer and those not seeking such help on various domains assessed by supernatural attitude questionnaire (SAQ)

| SAQ | Visit made to faith healer | Mean | SD | t-value | p-value | 95% CI limit | |
|---|----------------------------|------|------|---------|---------|--------------|-------|
| | | | | | | Lower | Upper |
| Belief of care giver in magico-religious and supernatural influences | No | 0.77 | 1.10 | -2.98* | 0.004 | -1.39 | -0.27 |
| | Yes | 1.60 | 1.37 | | | | |
| Attitudes of care givers with regards to magico-religious and supernatural influences as cause of mental illness | No | 1.85 | 2.28 | -2.17* | 0.032 | -2.36 | -0.10 |
| | Yes | 3.08 | 2.67 | | | | |
| Attitudes of care givers with regards to magico-religious and supernatural influences as cause of mental illness of the patient | No | 0.64 | 1.28 | -2.84* | 0.005 | -1.71 | -0.30 |
| | Yes | 1.65 | 2.05 | | | | |
| Behavior of care givers with regards to magico-religious and supernatural influences | No | 0.66 | 0.85 | -4.95* | 0.000 | -1.50 | -0.64 |
| | Yes | 1.73 | 1.05 | | | | |
| Attitudes of patient towards magico-religious and supernatural influences | No | 1.09 | 1.99 | -4.48* | 0.000 | -3.44 | -1.32 |
| | Yes | 3.47 | 2.88 | | | | |

*Statistically significant at $p < 0.05$

DISCUSSION

The current study explored the correlation between attitudes and beliefs of the patients attending the Psychiatry Out-patient Department and their primary care givers with regards to magico-religious and supernatural influences on mental disorders.

There were no significant differences between the male and female primary care givers on various domains of SAQ. A significant positive correlation was observed between the attitudes and beliefs of care givers and patients about role of magico-religious and supernatural influences in causation of mental disorders. Similarly, help seeking from faith healers was found to be correlated among the two. A significant proportion of primary care givers sought such help on behalf of their patients.

Many studies have explored the beliefs and attitudes towards magico-religious and supernatural influences among patients with psychosis and their care givers (Vlachos *et al.*, 1997; Kulhara *et al.*, 2000; Kurihara *et al.*, 2006; Huang *et al.*, 2011). Relatively fewer studies have been carried out among individuals with non-psychotic psychiatric disorders (Taieb *et al.*, 2006). Such studies have helped to understand the attribution models used by these patients and their care givers. Additionally, they have helped to understand the pathway to care among these populations (Kurihara *et al.*, 2006).

Earlier studies showed that attitudes and beliefs of care givers about mental illness are clearly linked to various demographic variables such as age, education (Brockman and D'Arcy, 1978) and gender (Farina *et al.*, 1981; Furnham and Chan, 2004). Findings from more recent studies have come up with mutually conflicting results. In a Nigerian study women and educated subjects were less likely to attribute their illness to supernatural influences (Ilechukwu, 1988). On the other hand, a study from Israel failed to find any difference based on gender and educational qualification (Al-Krenawi, 1999). The current study did not find any correlation between the attitudes and beliefs of patients and care givers and demographic variables of age, sex, education and employment. A previous study from India found a higher attribution of schizophrenia to supernatural causes by less educated relatives of schizophrenia patients (Srinivasan and Thara, 2001). However, another Indian study documented a high endorsement rate for supernatural influences in causation of mental disorders among highly educated individuals as well (Banerjee and Roy, 1998).

In the current study, 46% of care givers reported belief in magico-religious and supernatural influences. Additionally, 61% of care givers had favorable attitude towards magico-religious and supernatural influences as cause of mental illness. These values are higher than that

of 12% reported in a previous study from India among relatives of the schizophrenia patients (Srinivasan and Thara, 2001). However, Kulhara *et al.* (2000) reported that 40% of cases, the key relatives accompanying the patients believed that mental illness or behavioural abnormalities in the patients could be caused by various types of supernatural influences. Around 23% of the patients volunteered to seek help from faith healer for their mental disorder. Around 32% of care givers consulted a faith healer on their own for patients' mental disorder. Similarly, 35% of the care givers conducted some kind of ritual aimed at pleasing the supernatural influences to help the patient (Malhotra and Wig, 1975). Another Indian study found that only 2% of patients with psychotic illness preferred faith healing. Kulhara *et al.* (2000) reported that 33% of the relatives thought that magico-religious treatments could improve the patient's conditions, while it was actually carried out in 58% of the cases. However, only 20% of the patients sought such help on their own in this study. In the Nigerian study conducted among psychiatric out-patients attribution of psychiatric illness to supernatural influences was seen in around 50% of patients (Ilechukwu, 1988). In the Israeli study conducted among out-patients, all subjects attributed their psychiatric illness to supernatural influences (Al-Krenawi, 1999). Interestingly some studies conducted in western settings have also reported endorsement of supernatural influences by the study subjects as causal factors for psychiatric illness (Landrine and Klonoff, 1994).

It is important to study the role played by the traditional healers in management of various psychiatric disorders. Non-medical models of mental disorders continue to be prevalent in many cultures and societies. Similarly, traditional healers including faith healers remain a major service provider in these settings (Tobin and Friedman, 1983; Ilechukwu, 1988; Patel *et al.*, 1995; Al-Krenawi, 1999). Various psychiatric disorders such as schizophrenia, trance and possession have been attributed to 'outside supernatural factors' (Kurihara *et al.*, 2006). Studies from rural areas of Turkey have also reported a high rate of endorsement of magico-religious beliefs by the psychiatric patients (Ozturk and Volcan, 1971). Although, there has been a decline in such beliefs in more recent studies (Minas *et al.*, 2007). Multi-dimensional scaling of beliefs about disease causation has identified mystical influences (e.g., violation of a taboo, provocation by a spirit, casting of a spell) as an independent group (Eisenbruch, 1990). Validity of such a group has been established in Asian populations as well (Lee and Wong, 1995).

Beliefs about causes may alter patterns of help-seeking and response to treatment among psychiatric patients. Various studies have shown that cultural conceptions of mental illness have great impact on How mental patients seek help? and the way they are treated by health professionals as well as the public (Sheikh and Furnham, 2000; Furnham and Chan, 2004). Belief by psychiatric patients in supernatural causes was found to be associated with greater use of traditional healers and poorer compliance with medication (Razali *et al.*, 1996). Traditional healers such as witchcraft, holy water and herbalists, were preferred over medical help for a range of mental health problems in an Ethiopian study (Alem *et al.*, 1999).

It is important to address the magico-religious and supernatural beliefs and attitudes of care givers of patients with mental illness (Link *et al.*, 1999). These beliefs and attitudes influence emotional reactions and helping behaviours (Broussard *et al.*, 2010). Help seeking pathways are guided by person's efforts and his or her significant others' (Rogler and Cortes, 1993). Family members' supernatural causal attributions regarding schizophrenia were found to be strongly associated with non-receipt of psychiatric medical treatment by individuals with schizophrenia in an epidemiological survey in Bali (Kurihara *et al.*, 2006). Understandably these individuals were found to be in a relatively poorer state of health. The views of significant others about treatment for mental disorders have also been found to be influential. Professional help for depression is more likely to occur when another person recommends that help be sought (Dew *et al.*, 1991). Family continues to play a central role in care of patients with psychiatric disorders in many countries (Avasthi, 2010). This responsibility of family to care for the sick and disabled members stems from the traditional family orientation in these societies. Additionally, inability of government to meet the needs of entire population due to limited resources also makes it a necessity. Hence, it is important to take in to account their perspective on these issues.

In spite of recognition of its importance relatively few studies have explored the attitudes and beliefs of general public including care givers (Angermeyer *et al.*, 1999). The current study explored the attitudes, beliefs and behaviours of both patients and care givers for magico-religious and supernatural influences.

Importance of the interaction of culture, race and ethnicity on mental health has been well recognised (USDHHS, 2001). Substantial cultural differences exist across various ethnicities in terms of how they perceived mental illnesses. Relatives of patients with mental

disorders are more likely to attribute the causation to biological factors (Angermeyer and Matschinger, 1996a, b) or social factors (Priest *et al.*, 1996; Jorm *et al.*, 1997; Lauber *et al.*, 2003) in western societies. Attribution of psychiatric symptoms to supernatural influences is less commonly encountered in these countries (Angermeyer and Matschinger, 1999; Brandli, 1999). In contrast in various Asian and African societies magico-religious and supernatural beliefs such as possession by evil spirits or witchcraft have been used to explain causation of mental illness (Mo, 1984; Draguns, 1990; Ofori-Atta and Linden, 1995). In a comparative study from China and England, the subjects from China were more likely to endorse supernatural and superstitious influences as having a causal role in schizophrenia (Furnham and Wong, 2007). We found a positive correlation between beliefs in magico-religious and supernatural influences of the patients and care givers. Additionally, the strength of correlation was greater for the help seeking behaviour and belief that these influences contribute to mental disorders.

Beliefs are socially shared and not specific to the individual (Holzinger *et al.*, 2003). Patients and relatives draw on the same stock of culturally shaped patterns of interpretation. Hence, it is expected to have a positive correlation between their attitudes and beliefs about role of magico-religious and supernatural influences in causation of psychiatric disorders. The findings of the current study were in keeping with it. There was a positive correlation between beliefs, attitudes as well as help seeking behaviour of patients and care givers with regards to magico-religious and supernatural influences. However, a German study found endorsement of magico-religious beliefs only among the patients and not care givers (Holzinger *et al.*, 2003). Earlier studies have shown that Indian population believed to a variable extent that supernatural influences like demonology and black magic can cause mental illness (Verghese and Beig, 1974; Prabhu, 1983; Chakraborty and Bhattacharya, 1985). Study by Kulhara *et al.* (2000) also observed a proportionately lower rate of help seeking from faith healer by patients as compared to the care givers.

There is a little understanding about how people acquire knowledge and beliefs about mental health. Inadequate mental health literacy of care givers has been cited as a major hindrance to public acceptance of evidence-based mental health care (Jorm, 2000). Psycho-education of family members and patients about the psychiatric disorders is one of the approaches to correct these misconceptions. Such interventions among low-income communities have demonstrated their power to increase positive health outcomes (Schnittker, 2004). However, such education programmes need to be framed

carefully. It has been seen that educating people about the biological causes of schizophrenia may have a positive effect on people's readiness to seek professional help but may worsen their attitudes toward people with schizophrenia (Angermeyer and Matschinger, 2005).

Belief systems form the foundation of diagnosis, psychological consequences and treatment of mental illness (Gersten *et al.*, 1997). Hence, it is important to assess it. The findings of the current study help to understand this issue in Indian context. These findings are of clinical relevance. A high proportion of care givers (around one third) sought help from faith healers for their patients on their own. This is likely to result in delay in seeking medical help. Similarly, a large proportion of patients (45%) also believed in these influences and willingly consulted (25%) faith healer for their illness. It is important to psycho-educate both patients and care givers on these issues. Additionally, there is positive correlation between beliefs, attitudes and behaviours of the patients and care givers a change in either is likely to impact the other.

The current study had certain limitations. We included consecutive patients attending Psychiatry Out-patient Department. The subjects were not grouped as per the diagnosis. It would be interesting to see differences among individuals suffering from different psychiatric disorders about their beliefs and attitudes towards magico-religious and supernatural influences. We made cross-sectional evaluation. Following up this cohort over time would help understand change in the attribution model following exposure to medical care. Other possible causal factors were not explored. Inclusion of other biological and psycho-social factors would give a more comprehensive picture. The terms used to describe the supernatural influences are likely to change across different settings. SAQ used in the current study makes use of colloquial terms used in northern India. So the findings are applicable to the northern part of the country where these terms are in use. Relevant modifications would be required in the study questionnaire if one aims to replicate findings in another region of the country or other cultures.

CONCLUSIONS

The findings of the current study suggest that there were no significant differences between the male and female primary care givers on various supernatural attitudes and beliefs. A significant positive correlation was present between the attitudes and beliefs of care givers and patients about role of magico-religious and supernatural influences in causation of mental disorders. Help seeking from faith healers was found to be correlated

among the two. A significant proportion of primary care givers sought such help on behalf of their patients.

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