

# Assessment of Relatives Beliefs and Attitude on Mental Illness and Treatment in Kano, Nigeria

Ibrahim S. Yar' Zever

Department of Sciences, Bayero University Kano, Nigeria

## Corresponding author:

Ibrahim S. Yar' Zever, Department of Sciences, Bayero University Kano, P.O Box 161, BUK New site post office Kano, Nigeria,  
Tel: +234- 8037008973;  
E-mail: dr.ibyar@yahoo.com

## Abstract

**Background:** Mental health illnesses are major issues in Kano State, Nigeria. Therefore it is important for families to have the knowledge of mental healthcare illnesses, unfortunately, families lack knowledge of mental health education and that create negative beliefs and attitude about mental illness and that limit the optimal benefit of management to the patient. **Objective:** This cross-sectional study was conducted to evaluate relatives' knowledge, beliefs and attitude on mental illness and place of treatment in Kano State. **Methods:** This survey was conducted during the period of 5<sup>th</sup> June to 30<sup>th</sup> September 2016, where adult relatives (aged >20 years) of mentally ill patients receiving treatment for the period of 2 – 5 years in Dawanau Mental Health Hospital in Kano were invited for the study. Data was collected through face to face interview and focus group discussion method using semi -structured questionnaire guide and analyzed descriptively. All analysis was performed using Statistical Package for Social Sciences (SPSS) software (version 21). **Results:** In all, 266 participated in the study, of which 216 (81.2%) were males. Almost three quarter of respondents their ages were <40 years and about 188 (70.7%) were residing in the city of Kano. 112 (42.1%) were university graduates. 132 (49.6%) of the subjects thought that evil spirit was the major cause of mental illness, followed by personal weakness 126 (47.4%). While majority of the respondents 196 (73.7%) preferred home treatment. Those who believed in spiritual treatment for mental illnesses were 192 (72.2%); of this number, 99 (51.6%) believed in Quran, and 88 (45.8%) on both Quran and herbs. In fact, majority 194 (72.9%) of the participants believed that medicines can treat the mental illness. **Conclusions:** The study showed that negative beliefs about the causes and signs of mental illnesses were rampant. Negative attitudes were also noticed among the respondents. There is a need for health education awareness and interventions in communities for a better knowledge of mental illness and good beliefs and attitude.

**Keywords:** Assessment; Knowledge; Mental Illness; Kano

## Introduction

Mental disorders may affect one out of four people during their lives, affecting population despite their ages; cultural socio-economic background.<sup>[1]</sup> These disorders include unipolar depressive disorders, bipolar affective disorders, schizophrenia, alcohol and drug use disorders, obsessive and compulsive disorders and panic disorders.<sup>[1,2]</sup> It is estimated that about 450 million people have mental disorders globally.<sup>[2]</sup> By the year 2020 neuropsychiatric conditions will account for 15% of disabilities worldwide.<sup>[2]</sup> The total economic burden of these diseases is enormous in terms of gross national product loss.<sup>[3]</sup> In Nigeria, as in the rest of the world these diseases are prevalent. In the Northern part of Nigeria one 3rd of patients were found to suffer from mental illnesses.<sup>[4]</sup> In Kano State- Nigeria, there is an overall improvement in delivery of mental health services to clients presenting with different mental illness conditions who, like any other health consumers, should lead a better quality of life.<sup>[5]</sup> A study showed that family attitudes towards mental illness were negative with regard to understanding of the nature of these diseases and its implications.<sup>[6]</sup> Caregiver's satisfaction with mental health services is felt when there is mutual collaboration with the healthcare professionals providing care for their ill relatives. The responsibility of the care of mental health patients has been shifting from the hospital to the community. Families are a vital part of patient care, seventy-

five percent of all patients discharged from psychiatric hospitals live with their families therefore families work in cooperation with mental health professionals in the care and treatment of people with mental illness.<sup>[6]</sup> At the same time, families are a valuable resource in the gathering of relevant patient-related information necessary for effective management. Furthermore, family participation in the treatment can lead to enhanced social functioning, less conflict and decreased episodes of hospital admission.<sup>[7]</sup>

## Justification

There is a high prevalence rate of mental illness in Kano population especially within the young population.<sup>[8]</sup> It is estimated that at least 33% of all general medical patients have a diagnosable mental health problems and about 50-60% of general hospital in-patients suffer from significant psychological dysfunction as a primary problem or secondary to a diagnosed medical illness in Kano.<sup>[8]</sup> Many of these families

This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

**How to Cite this Article:** Yar'Zever IS. Assessment of Relatives Beliefs and Attitude on Mental Illness and Treatment in Kano, Nigeria. *Ann Med Health Sci Res.* 2017; 7: 110-115

lack knowledge of mental health education and that create negative beliefs and attitude about mental illness and limit the optimal use of treatment services. According to our knowledge; there is no data about the family beliefs and attitudes about mental illness, their causes and best place for treatment in Kano. Therefore, this study was conducted to identify relatives' beliefs and attitudes on mental illnesses and place for management or treating of these diseases.

## Methods

### Study design

This survey cross-sectional study was conducted from 5th June to 30th September 2016.

### Participants

During the period of 5years, there were 656 admissions into the Dawanau Mental Health Hospital Kano. A sample of 266 respondents who were first- degree family members of patients diagnosed with mental illnesses and receiving treatment in Dawanau mental health hospital between within the 5years period and were 20 years and above were selected for the study using probability and non-probability techniques.

### Study inclusion criteria

20 years old or above; being a first degree family member of a mental health patient diagnosed at least two years prior to the study and still receiving treatment; who were literate and gave voluntary informed consent to participate in the study.

### Setting

The mental health hospital in Kano- Nigeria provides health services to the population living in Kano and the neighboring states. The hospital is open for 24 hours a day, 7 days a week. It has 25 beds and 8 wards with a number of nurses and doctors at work providing mental health services for in-patients and out-patients. The hospital is full with both new patients coming in and those coming for follow-up after discharge for a number of weeks or months. Information and counseling services are not well offered to families on a regular basis due to high level of patients in the hospital. Instead, information concerning illness and medications as provided by the relatives are more taken into consideration and provided.

### Data collection instruments

A structured questionnaire guide for face to face interview and a FGD guide were used to collect the data,<sup>[9]</sup> The questionnaire assesses relatives of mental illness patient's characteristics on causes and symptoms of mental health illnesses, beliefs and attitude concerning place for illness management and treatment. The questionnaire instrument for interview comprised 14 questions in 4 sections, while the FGD comprised of three groups as described in the literature.<sup>[10]</sup> The first section consisted of questions concerning demographic characteristics of the respondents, the second section was regarding knowledge of the illness, the third section was regarding respondent's beliefs about mental illness, and the fourth section was respondent's attitude towards place of treatment. Responses to the questions in the last three parts were recorded using 5- point-likert scale

(Strongly agree, agree, neutral, disagree, and strongly disagree). In each of the section, both closed-ended and open-ended multiple-choice questions were used for the questionnaire. For the FGD, the assessment was on the disease knowledge, the different mental diseases, causes and symptoms and attitude towards care and place of treatment.

### Validity and reliability study

A panel of three specialists, a Public health consultant, a Medical sociologist and a Psychologist subsequently discussed and judged the face and content validity of the final questionnaire. The questionnaire was thorough revised by the research team for validity, comprehensiveness, and appropriateness to collect the required information from the targeted population. The questions were modified as necessary to reflect the results of the pre-testing. To assess the reliability of the questionnaire, internal consistency reliability testing was conducted and test-retest reliability was conducted by asking a subgroup of the respondents (20 relatives) after a two-week period to complete a second copy of the questionnaire (alpha reliability=0.780-test-retest reliability=0.880).

### Ethical considerations

Government approval for the conduction of the study was obtained from Kano state ministry of health and approved by the office of the social welfare center. The family members were specifically informed regarding their entitlement to information regarding the study, voluntary participation, privacy issues, their right to refuse to divulge information, and to terminate their participation at any time. While all the respondents gave their oral approval for participating in the study.

### Pilot Study

The questionnaire was first tested for content validity before it was pilot tested with 15 respondents who were not part of the study. These procedures enabled the researchers to refine the questionnaire before it was used eventually for actual data collection. The survey questionnaire took approximately 15-20 minutes to complete.

### Data analysis

Descriptive statistics of all studied variables was presented in frequencies, percentages and Proportions. The chi-squared or Fischer exact tests were used to examine the association between different variables when appropriate. The significance level was set at  $p < .05$ . All analysis was performed using Statistical Package for Social Sciences (SPSS) software for windows 21 version.

## Results

### Demographics characteristics of respondents

Overall 266 relatives were participated in the study, of them 216 (81.2%) were males. Nearly three quarter of respondents their ages were <40 years. Participants who were residing in the town were 188 (70.7%) and 112 (42.1%) had university education. More than half of the interviewees their family monthly income was <50,000 naira. Out of the relatives 130 (48.9%) were married and about 188 (70.7) lived in urban Kano, while 112 (42.1) were university graduates and just 14 (5.3) were illiterate. Patients' demographics are presented in Table 1.

**Table 1: Respondents' demographics n=266.**

Background characteristic	Frequency	Percent
<b>Gender</b>		
Male	216	81.2
Female	50	18.8
<b>Age in years</b>		
<30 years	123	46.2
30-39 years	75	28.2
> 40 years	68	25.6
<b>Residence</b>		
Town	188	70.7
Outside town	78	29.3
<b>Marital status</b>		
Married	130	48.9
Single	125	47.0
Widowed	3	1.1
Divorced	8	3.0
<b>Educational level</b>		
University	112	42.1
Post-Secondary	80	30.1
Secondary	42	15.8
Primary	18	6.8
Illiterate	14	5.3
<b>Family monthly income (naira)</b>		
<50,000	139	52.3
50,000-100,000	95	35.7
>100,000	32	12.0
<b>Total</b>	<b>266</b>	<b>100</b>

### Causes of mental illness and diagnosis as disclosed by respondents

Table 2 shows evil spirit was considered by 132 (49.6%) of the respondents as a major cause of mental illness, followed by personal weakness 126 (47.4%). Males more than females attributed mental disease to personal weakness 110 (50.9%) and 16 (32%) respectively ( $P=0.011$ ). Equal number 108 (40.6%) of interviewees reported misuse of drugs and stress and social problems. Females 26 (52%) considered that stressful life and social problems as a cause of mental illness more than males 82 (38%), ( $P=0.049$ ). Brain disease and magic were also considered as causes by 61 (22.9%) and 53 (19.9%) respectively. Table 3 showed that overt abnormal behavior was the most identified symptom of mental illness. In the interviewed, respondents often referred to strange or unusual behavior in general. The most commonly identified symptoms were related to abnormal talking and laughing followed by wandering. Other symptoms of mental illness often identified in both interview and FGD were aggression or violence and loss of memory or recognition. Imagining things was a symptom that only appeared in the interview response. The participants of the focus group discussions also identified several clusters of symptoms. The symptom cluster 'unconscious behavior' was most often associated with strange behavior, talking or laughing alone, improper dressing and abnormal eating behavior, while the

symptom cluster 'sad or unhappy' was mostly associated with abnormal facial expressions and avoiding contact or isolation.

**Table 2: Respondents causes of mental illness.**

Cause of mental illness	Frequency	Percent
Evil spirit	132	49.6
Personal weakness	126	47.4
Misuse of drugs	108	40.6
stress and social problems	108	40.6
Brain disease	61	22.9
Magic	<b>53</b>	<b>19.9</b>
Others	<b>26</b>	<b>10.00%</b>

**Table 3: Respondents knowledge of symptom of mental illness.**

Rank	FGD questions Response	(%)*	Rank	Interview Response	(%)*
1	Talking nonsense	39.5	1	Talking/laughing alone	90.5
2	Wandering	35.5	2	Wandering	89.9
3	Strange/unusual behavior	25.5	3	Loss of memory	82.5
4	Aggression/violence	18.5	4	Imagining things	70.4
5	Loss of memory/ recognition	16.5	5	Talkativeness	49.0
6	Talking/laughing alone	16.0	6	Aggression	43.2

\*Multiple responses recorded. Percentages represent proportions of respondents

### Respondents Preferred place of treatment for mental illness

As shown in Table 4 both FGD and interviewed responses showed that majority of the respondents preferred medical treatment options, such as mental hospital, hospital or doctor and drugs. Besides medical care, many participants also expected results from the support of family and friends and care at home. Only a minority of respondents considered treatment by traditional healers as a possibility and only in the questionnaire responses. When the focus groups discussed the case stories, support from family and friends was considered the most appropriate way and place to deal with all kinds of mental illness, although often in combination with medical treatment options.

**Table 4: Respondents Preferred place of treatment for mental illness n=266.**

Rank	FGD Response	(%)*	Rank	Interview Response	(%)*
1	Mental hospital/ psychiatrist	50.5	1	General hospital/ CHC	98
2	Hospital/doctor	47	2	Mental health hospital	97
3	Drugs	28.5	3	Drugs	95
4	Support family/ friends	20	4	Family	64.5
5	Easy to deal with patients"	80.2	5	Easy to deal with patients	74.1
	Difficult to deal with patients	12.2		Difficult to deal with patients	25.9
6	Treatment at home	17.5	6	Local traditional healer	34.5

\*Multiple responses recorded. Percentages represent proportions of respondents

**Table 5: Respondents beliefs on patients with mental illness (n=266).**

Item	Strongly agree	Agree	Don't know	Disagree	Strongly Disagree
Mentally ill person are easily identify	79 (29.7%)	65 (24.4%)	64 (24.1%)	38 (14.3%)	20 (7.5%)
Mentally ill persons are not capable of true friendships	52 (19.5%)	44 (16.5%)	65 (24.4%)	75 (28.2%)	30 (11.3%)
Mentally ill persons can Work.	61 (22.9%)	88 (33.1%)	38 (14.3%)	50 (18.8%)	29 (10.9%)
Mental illness can happen at any time*	60 (25.6%)	79 (29.7%)	71 (26.7%)	36 (13.5%)	11 (4.1%)

\* Missing =1

**Table 6: Respondents attitudes towards mentally ill patient (n=266).**

Item	Strongly Agree	Agree	Don't know	Disagree	Strongly Disagree
Mentally ill person can't make good decisions	33 (12.4%)	62 (23.3%)	79 (29.7%)	65 (24.4%)	27 (10.2%)
I could have friendship with Mentally ill person.	56 (21.1%)	119 (44.7%)	56 (21.1%)	27 (10.2%)	8 (3.0%)
I could marry someone with a mental illness	25 (9.4%)	47 (17.7%)	71 (26.7%)	76 (28.6%)	47 (17.7%)
I would not want people to know if suffering from mental illness	33 (12.4%)	47 (17.7%)	75 (28.2%)	67 (25.2%)	44 (16.5%)
I would be disappointed if family member is diagnosed with Mental illness	40 (15.0%)	51 (19.2%)	55 (20.7%)	60 (22.6%)	60 (22.6%)

### Relatives' beliefs on mental illness

Table 5 shows that more than half of the interviewee's respondents held the view that people with mental illness can be identified by their physical appearance. Less than forty percent of the participants believed that mentally ill persons are not capable of making true friendships. More than half of the respondents agreed that mentally ill persons can work. Nearly fifty five percent of the participants agreed with the statement that anyone can have a mental illness. In this respect, respondents whose ages were >40 years agreed more with the previous statement than younger ones, (P=0.017).

### Attitudes towards mentally ill patient

Nearly thirty five of the interviewed relatives agreed that mentally ill person should not be allowed to make decisions, even those concerning routine events {Males significantly agreed more than females (P=0.013)}. Over 65% of the relatives agreed that they could maintain a friendship with mentally ill person. Out of the interviewees (27.1%) agreed that they could marry someone with a mental illness. Nearly thirty percent of the respondents held the idea that they would not want people to know if they are diagnosed with mental illness. Less educated strongly agreed that they will hide their diagnosis with mental illness compared to highly educated ones (P=0.001). However, more than thirty five percent of the respondents stated that they will be ashamed if one of their family members diagnosed with mental illness [Table 6].

### Attitudes towards place treatment of mentally ill patients

Less than one third in FGD (17.5%) preferred their patients to receive treatment within the family at home, while only (34.5%) in the interviewed group agreed that their patients should be treated at traditional healers at home. In this respect, respondents of "easy to deal with patients" in the FGD preferred (86.2%) home treatment more than participants in interviewed group (74.1%), also with "difficult to deal with patients", (12.2%) of the FGD group discourage home treatment as against (25.9%) in the interviewed group (P=0.000). The majority more than half (50.5%) of the participants in FGD believed that mental illness

should be treated in mental hospitals while the interviewed group believed general hospitals could also solved the same purpose. Also (28.5%) in FGD group claimed that drugs alone can treat mental illness but almost all (95%) in the IDI agreed that hospital drugs are the best way of treating mental illness

## Discussion

The increased prevalence of mental illness in Kano and the centralization of mental health services place the families in the difficult position as to where to assess treatment when a family member becomes ill. Mutual collaboration of the families with the healthcare professionals needs proper understanding of mental illness, their causes, and treatment outcomes. Analysis of the demographic data obtained in the current study showed that over 70% of the families of mentally ill patient's reside within Kano metropolis. Rapid urbanization and urban life have a series of negative impacts on individuals' mental health. [11] Magliano [12] identified strong association between urbanization and the increased rate of some mental disorders among both gender. Nearly half of the relatives' family monthly incomes were within the lower determined limit. Strong association between poverty and increased risk of mental illnesses was documented. [13] On the other hand, mentally ill persons are more likely to be drifting into, or remain in, poverty because of disability and associated stigma.

Beliefs about the causes of mental illness may alter both patterns of help-seeking and outcome of treatment. Regarding the causes of mental illnesses a broad range of causes were reported by the participants. Nearly half of the respondents believed that 'evil spirits are major causes of mental illness. The 'evil spirits' has long been a topic of interest in northern Nigeria. This finding can be attributed to the strong religious belief on evil spirits among Kano people. [14] A considerable number (47.4%) of interviewees attributed mental illness to personal weakness. Similarly in other societies believed on personal weakness as a cause of schizophrenia. [15] Equal number (40.6%) of interviewees reported misuse of drugs, and stressful life and social problems as causes of mental illnesses. In contrast, in study conducted in South-West, Nigeria, the majority (95%) of participants attributed mental disorder to alcohol and illicit drugs abuse. [16] Stressful life events and impaired social support

were found to be significantly associated with the occurrence and course of mental disorder.<sup>[17]</sup>

Generally the interviewed relatives in the current survey had negative attitudes towards mentally ill patients and mental illnesses. Similar finding was reported from Western Nigeria as researchers reported very mixed attitudes towards mental illness patients, negative attitudes towards mentally ill patients with regard to treatment, work, social aspects and cure of mental illness.<sup>[11,18]</sup> Negative attitudes were found to be correlated with religious-magical views as causation mental illness.<sup>[9,19]</sup>

Despite the fact that above 40% of the relatives participated in the current survey had university education but unfortunately this did not improve their knowledge and attitudes towards mental illness or mentally ill patients. This may be attributed to the absence of health educational programs and the influence of community beliefs on mental illnesses. In Ghana a higher level of education was found to be associated with more positive attitudes towards mental illness.<sup>[20]</sup>

Less than half of the interviewed relatives believed that hospitals provide good care for mentally ill patients, while > 50% of them agreed that patient with mental illness can be treated outside the hospital especially for the easy to handle patients. Up to date no scientific evidence to support the use of hospital services alone for the care of mentally ill patients.<sup>[21]</sup> In Eastern societies, families have a central role in patient treatment.<sup>[22]</sup> But according to the findings from the current survey not all families preferred in home treatment, especially when it is difficult to deal with the patient.

Results from the present study showed that the relatives believed that symptom like 'wandering around or strange behavior', 'aggression' and talking nonsense were ranked as the most severe problems with mental illness patients. These findings are in agreement with other studies in Nigeria,<sup>[1,22]</sup> suggesting that overt psychotic behavior that attracts public attention and is socially disruptive is associated with mental illness, in any society.<sup>[23,24]</sup> These results suggest that relative's perceptions of the severity of mental illnesses are strongly related to the recognition of those illnesses and related symptoms, and that both are strongly influenced by a lack of knowledge and awareness.

A considerable number of participants believed on traditional and/or spiritual treatment with Holy Koran. Likewise a nearly similar percentage of the recruited relatives believed that medicines can treat mental disorders. In order to produce the best, fastest, and enduring outcomes treatment plan for patient with mental illness all aspects of the mental illness must be considered.<sup>[25]</sup>

The also results showed that nearly half of the patients were considered by their relatives as indulge in drugs. Interestingly the results of the present study found that relatives' positive belief on hospital treatment was significantly associated with patient commitment to treatment plan. This can be considered as a practical indicator for the influence of positive beliefs on the outcome of treatment and patient well-being.<sup>[26]</sup>

## Study Limitations

As the current study was conducted in Dawanau Mental hospital, the sample of the recruited relatives may not be a representative to the whole society; this limits the generalizability of the obtained results. Future studies in the topic can include sample from the entire population of the state.

## Conclusion

This study gives unique insights into the beliefs of mental health among an urban population like Kano. The results demonstrate a need for educational and awareness programs about the causes and symptoms of mental illnesses and in particular about neglected common illnesses like mood and anxiety disorders. Programs should address the different treatment options and people should be encouraged to seek help in an early stage of illness instead of home treatment. In developing such programs culture-specific notions of mental illness should be taken into account. The importance of the family should be acknowledged and efforts should be made to understand the needs of families, in order to provide them with support and skill training. More research is needed on prevalence rates of mental disorders, the availability and accessibility of mental health care services. Education is an important variable affecting information levels. Health educational interventions are badly needed to educate the public on important aspects related to mental illnesses.

## Acknowledgement

The authors would like to acknowledge Professor Gateel foundation which assisted in the data collection and analyses of the research. The author would like to thank all those who participated in the study especially our team of expert's, and above all the respondents (patients) who participated in the study.

## Conflict of Interest

All authors disclose that there was no conflict of interest.

## References

1. Kabir M, Iliyasu Z, Abubakar IS, Aliyu MH. Perception and beliefs about mental illness among adults in Karfi village, northern Nigeria. *BMC International Health and Human Rights* 2004; 4:3.
2. Gasque-Carter KO, Curlee MB. The educational needs of families of mentally ill adults: the South Carolina experience. *Psychiatr Serv*. 1999; 50: 520-524.
3. Shankar J, Muthuswamy SS. Support needs of family caregivers of people who experience mental illness and the role of mental health services. *Families in Society*. 2007; 88: 302-310.
4. Bademli K, Cetinkaya-Duman Z. Family to family support programs for the caregivers of schizophrenia patients: a systematic review. *Turk Psikiyatri Derg*. 2011; 22: 255-265.
5. Adewuya AO, Makanjuola RO. Social distance towards people with mental illness in southwestern Nigeria. *Australian and New Zealand Journal of Psychiatry*. 2008; 42: 389-395.
6. Addington J, McCleery A, Addington D. Three-year outcome of family work in an early psychosis program. *Schizophr Res*. 2005; 79: 107-116.
7. Adebawale TO, Ogunlesi AO. Beliefs and knowledge about etiology of mental illness among Nigerian psychiatric patients and their relatives. *African journal of medicine and medical sciences*. 1998; 28: 35-41.

8. Kabir M, Iliyasu Z, Abubakar IS, Aliyu MH. Perception and beliefs about mental illness among adults in northern Nigeria. *BMC International Health and Human Rights*. 2006; 4:3
9. Huang XY, Sun FK, Yen WJ, Fu CM. The coping experiences of carers who live with someone who has schizophrenia. *J Clin Nurs*. 2008; 17: 817-826.
10. Pham MT, Rajic A, Greig JD, Sargeant JM, Papadopoulos A (2014) A scoping review of scoping reviews: advancing the approach and enhancing the consistency. *Research Synthesis Methods* 5:371-385
11. Doornbos MM. Family caregiving for young adults with severe and persistent mental illness. *Journal of Family Nursing*. 2001; 7: 328-344.
12. Magliano L, Guarneri M, Fiorillo A, Marasco C, Malangone C, Maj M. A multicenter Italian study of patients' relatives' beliefs about schizophrenia. *Psychiatr Serv*. 2001; 52: 1528-1530.
13. Arksey H, O'Malley L. Scoping studies: Towards a methodological framework. *International journal of social research methodology*. 2005; 8: 19-32.
14. Yildiz M, Yazici A, Cetinkaya O, Bilici R, Elçim R. Relatives' knowledge and opinions about schizophrenia. *Turk Psikiyatri Derg*. 2010; 21: 105-113.
15. Pham MT, Rajic A, Greig JD, Sargeant JM, Papadopoulos A. A scoping review of scoping reviews: advancing the approach and enhancing the consistency. *Research synthesis methods*. 2014;5:371-385.
16. Solomon P. Interventions for families of individuals with schizophrenia maximizing outcomes for their relatives. *Dis Manage Health Outcomes*. 2000; 8: 211-221.
17. Mueser KT, Bellack AS, Wade JH, Sayers SL, Rosenthal CK. An assessment of the educational needs of chronic psychiatric patients and their relatives. *Br J Psychiatry*. 1992; 160: 674-680.
18. Rummel-Kluge C, Kissling W. Psychoeducation in schizophrenia: new developments and approaches in the field. *Curr Opin Psychiatry*. 2008; 21: 168-172.
19. Sung SC, Hixson A, Yorker BC. Pre-discharge psychoeducational needs in Ghana: comparisons of psychiatric patients, relatives, and professionals. *Issues Ment Health Nurs*. 2004;25:579-588.
20. Chien WT, Norman I. Educational needs of families caring for Chinese patients with schizophrenia. *J Adv Nurs*. 2003; 44: 490-498.
21. Drapalski AL, Marshall T, Seybolt D, Medoff D, Peer J, Leith J, et al. Unmet needs of families of adults with mental illness and preferences regarding family services. *Psychiatr Serv*. 2008; 59: 655-662.
22. Solomon P, Draine J, Mannion E, Meisel M. Increased contact with community mental health resources as a potential benefit of family education. *Psychiatr Serv*. 1998; 49: 333-339.
23. Yıldız M. Psychiatric Rehabilitation. In: Koroğlu E, Gulec C, editors. *Textbook of Psychiatry*. 2nd ed. Ankara (Turkey): Nobel Bookstore; 2007; pp. 726-731.
24. Magliano L, Veltro F, Guarneri M, Marasco C. Clinical and socio-demographic correlates of coping strategies in relatives of schizophrenic patients. *Eur Psychiatry*. 1995; 10: 155-158.
25. Howard PB. The experience of fathers of adult children with schizophrenia. *Issues Ment Health Nurs*. 1998; 19: 399-413.
26. Akighir A (1982) Traditional and modern psychiatry: A survey of opinions and beliefs amongst people in plateau state, Nigeria. *International Journal of Social Psychiatry* 28: 203-209.