An Explanatory Model of Depression among Female Patients in Fars, Kurds, Turks Ethnic Groups of Iran

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Abstract

Background: Depressive disorder is globally estimated to be as many as one in five visits to primary health care. Approximately more than 50% of depressed women in primary care are not diagnosed. As a part of a major investigation into perceptions of women’s depression, this study explored how female patients and their relatives conceptualize patients’ conditions in three ethnic groups in Iran (Fars, Kurds and Turks).

Methods: Qualitative methods were used for data collection. Depressed women and their relatives were purposively selected from the public psychiatric clinics affiliated to university of medical sciences in the three study cities. Twenty-five depressed women and 14 relatives were interviewed in three ethnic groups.

Results: One theme “illness meaning”, including three categories: perceived symptoms, label of the illness, and effects of the illness was found through the content analysis. The participants perceived symptoms of illness as somatic and psychological depending on the participant’s assumed reason for the onset of the illness. There were most similarities in term used for of the illness in the three ethnic groups. Most of the study participants described the illness in terms of nerve problems/illness, and depression “afsordehgi”. The most important effects that depressed women had experienced because of their illness were marital conflict or a guilt feeling originating from their inability to support family.

Conclusion: These findings suggest the need to recognize and choose appropriate diagnostic approach for depressed women in the context of Iran.

Keywords: Depression, Ethnicity, Illness experiences, Explanatory model, Women

Introduction

Depression is one of the most prevalent diseases globally, ranking fifth among women and seventh among men as a cause of morbidity (1). It is predicted to be the second most important cause of disability by 2020, and ranks as the fourth cause of disease in terms of DALYs and years of life lost (YLL) in the world (2). The national Mental Health Survey from 1999, which focused on the population above 15 yr of age in Iran, showed that the prevalence rates of
depression in the capital city, Tehran, the city of Ilam (majority Kurdish) and Western Azerbaijan (predominantly Turkish) were 18.5%, 20.3% and 30%, respectively (3). “Depression was higher among women compared with men in all parts of Iran (4.3% versus 1.5%) which is similar to global health findings” (4, 5). Difference in prevalence rates of depression between women and men may relate to gender and marital roles as well as to differences in underlying causes such as the frequency of life events, biological factors, domestic violence, and lack of employment and social role (6, 7).

Despite the fact that depressive disorder is globally responsible for as many as one in five visits to primary care (8), the most depressed patients, as well as more than 50% of them, are not diagnosed and do not receive appropriate treatment (9). It could be because of cultural causes of misdiagnosis (10-11). Therefore, creating locally appropriate diagnostic and treatment approaches would be suitable for each culture (12, 13). In this regard, less attention has been paid to the concept of depressed women on their illness (14 - 15). As a part of a major investigation into perceptions of women’s depression (among lay people), depressed women and clinicians(16,17), the purpose of the present study was to describe the idioms and cause of distress expressed by depressed women (and their relatives).

Materials and Methods

The study used a qualitative design, because its usefulness in transcultural psychiatry and psychology research (18) employing explanatory guidelines based on Kleinman’s original concepts, which examine health and illness from an anthropological point of view (19). In this study, individual interviews were conducted with female patients and their relatives to understand the world from their point of view, understand their experiences, and uncover their lived world (20, 21).

Study Participants and Sampling Process

Depression is defined in this study in accordance with the DSM-IV’s (22) definition of clinical depression. Study participants were selected from the three cities with different ethnic backgrounds, which was described in our previous papers (16, 17), located in the central (Tehran, the capital city, for the Fars ethnic group), north-west (Tabriz, for the Turk ethnic groups) and west (Ilam, for the Kurd group) parts of the country. The participants were recruited during April to May 2008. The research team consisted of two trained assistant researchers present in each city and supervised by the first author. The interviews were held during two days in the main public mental health clinics (n= 4, two mental public health clinics in Tehran, and one in Ilam and Tabriz, respectively) which are affiliated to the public university of medical sciences in each of the three cities. All female patients who had come to the mental public health during the recruitment period and diagnosed as depressed by psychiatrists in each clinic were referred to those in the research team who were female, had knowledge of the language of the city, and then interviewed. After the interview, one of the assisting researchers (a psychiatrist) conducted an interview-based assessment using the Hamilton’s 19- item Depression Scale, (with Dr Hamilton’s written permission) (23) to confirm the diagnosis of depression. Scores between 0 and 6 indicate a normal or non-depressive state; patients with such a score were excluded from the study. Other exclusion criteria were mental retardation based on clinical evaluation and any main medical condition on DSM-IV axis III. Inclusion criteria for patients were depression as a DSM-IV axis I diagnosis, 18 yr of age or older, belonging to one of the three ethnic groups (Fars, Turks and Kurds) and at least 5 yr of residency in one of the study cities. All relatives who had accompanied female patients in the public mental clinic were included in the study. Each interview took about 60 to 80 min, and was audio typed. Interviews were held in a quiet room located in a public clinic. All patients and their relatives who accepted our request for an interview participated in the follow-up explanatory interview conducted concurrently in different rooms at the clinic. The total number of com-
pleted interviews in each ethnic group was determined by data saturation (21), that is, the point at which no new themes were result from the interviews. Of the total 30 female patients who were approached for individual interviews, three in Tabriz and two in Ilam declined to participation due to the patient's lack of time. Among the 25 female patients who accepted participation, 14 were accompanied by their relatives. The relatives were husbands (n=5), children (n=5, mean age 20 yr), siblings (n=3), and an aunt (n=1).

The Kleinman’s explanatory model (19, 24) served as a topic guide. The questions were used in a similar study conducted in Uganda and our pilot study (25, 26). We translated and back translated the questions posed to the patients in order to appropriately harmonise them to the three ethnic cultures. We then discussed the translated topic questions with research colleagues in the three study locations at the scientific committee in order to ensure similarity of meaning of each item in each culture that was studied (Fig. 1). The questions posed to the relatives were developed by a scientific committee consisting of psychiatrists from the three study locations, a review of literature as well as the Kleinman’s explanatory model (19, 24). We field tested and refined the topic questions with relevant people from the three ethnic groups. Some questions were revised and some probe questions were added as memory aids the interviewers to ensure that the interviewers would fully cover all aspects of the study objectives.

**Analysis**

Data analysis was performed with the approach to deductive content analysis (27, 28) because the structure of the analysis was based on previous knowledge and the purpose of the study on the existing theory (29). In our study, after each interview the tapes were transcribed verbatim. The Fars, Turkish and Kurdish participants were interviewed, respectively, in Persian, Turkish and Kurdish languages, after which the Turkish and Kurdish interview tapes were transcribed directly into Persian by the interviewer who had bilingual knowledge. Independent bilingual researchers from the study-site cities also listened to a sample of tapes and transcripts them into the Persian. In order to understand indirect meanings presented within the data, research teams (interviewers) from the three cities helped us code and analyze the data. In each city, we (the first author and the interviewers) read all the data repeatedly to obtain a sense of the whole texts and identified meaning unit of; including word phrase and paragraph (27). We developed a categorization matrix (Fig. 2) based on the Kleinman’s explanatory model topic guide on which the interview instrument was based. Then all data were reviewed for content and coded for correspondence with the identified categories. The codes covered concept of the illness, cause and effect of the illness, help seeking behaviour and expectation of the treatment. The most common categories were summarized, and then direct quotes were selected to illustrate these categories and provide practical examples in the words of participants. After this, we compared the codes, subcategories, categories and themes by ethnicity (Fars, Kurd and Turk) and type of participants (i.e. the female patients and their relatives). Finally, the team cross-checked their coding strategies and after detailed discussion, reached a consensus. The analysis was performed with the aid of open code 3 (qualitative data-analysis software).

**Trustworthiness**

Trustworthiness in qualitative research has been divided into credibility, dependability, conformability and transferability (21, 30). In this study, we established credibility through the main researcher’s prolonged engagement with the subject matter and triangulation of data sources (interview with depressed women and their relatives) and investigators (using more than one investigator for data collection and analysing). We completed “Member Checking” by presenting of a summary of the interview to the interviewees (both female patients and their relatives) at the end of each interview as well as sending the results to some of the depressed female patients by convenience sampling to confirm the research find-
nings. To address the issues of dependability and conformability throughout the entire research process, the main and local supervisors (auditors) examined the audit trail consisting of the translated transcripts, data analysis documents and comments from the member. To address transferability, the complete set of data analysis documents are on file and available upon request. This access to the inquiry’s “paper trail” gives other researchers the ability to transfer the conclusions of this inquiry to other cases or to repeat, as closely as possible, the procedures of this project (29, 31).

**Ethical Considerations**

The nature and purpose of the study were explained to each participant before his or her consent was sought. Individual informed consent was gained from patients and their relatives. Participation was voluntary. The informed consent of respondents was confirmed by signature or left thumbprint. Participants were also assured of confidentiality and informed during the interview of their right to withdraw from the study at any time. Permission to audiotape the interview session was sought orally from each informant prior to the interview. All recorded citations exemplify the themes without disclosing their identification. The study protocol was approved by the ethical committees at the three universities of medical sciences in Tehran, Ilam and Tabriz, and by the National Ethical Committee in Iran, P373, and 23 July 2005. Ethical committee at Karolinska Institutet, EPN considered the ethical questions and found since there was no research done in Sweden no evaluation was performed (2005/5:8).

**Results**

There were similarities in the terms used for of the illness in the three ethnic groups. One theme “illness meaning” including three categories: 1) perceived symptoms, 2) label of the illness, and 3) effects of the illness were found in this study.

**Illness meaning**

1) Perceived symptoms: The symptoms perceived by the patients were divided into two main categories: somatic and psychological. Patients who had been visited by the psychiatrists in the clinic in the study locations for the first time mostly focused on somatic symptoms and patients who had presented more than once (a majority of participants in the three ethnic groups) stated both the somatic and the psychological symptoms. To some extent, the patient’s complaints were dependent on the reason which she or her relatives assumed was the onset of the illness. In cases where the patients attributed their problems to outside social events, most complaints were somatic. When the patient did not attribute the illness to outside events, she assumed it was a result of personal characteristics, and the main symptoms were psychological.

The most common somatic symptoms reported by all the patients were body pains such as headache and stomachache. Many of the symptoms closely resembled biomedical phenomena of depression, such as insomnia, loss of appetite and restlessness. However, with other symptoms, a potential connection with depression was less clear, such as sudden pangs of pain (resembling electric shock) in the back, a sensation of suffocation or having a lump or a growth/tumour in the throat, blushing, pressure on the heart, a stiff neck, numbness in the back or the leg, or limb pain causing an inability to walk, a crawling sensation in the abdomen, or hot fluid in the scalp and back. These findings were similar in the three ethnic groups.

“I went to a neurologist for headaches and they did a MRI and CT scan and told me that I was healthy and did not have any special problem. I wish I had a tumor in my head so it could be removed or that I died or survived.” (Depressed Turkish woman, 45-yr old, married)

It appears that even though patients had experienced psychological symptoms, they did not complain about them because they did not take them to be symptoms of an illness. On the other hand, the most common psychological symptoms reported by the patients in all the three ethnic groups included sadness, crying, excessive thinking (thinking too much), restlessness, silence and seclusion, lower levels of energy and a lack of ability to work.
2) Label of the illness: There were most similarities in term used for of the illness in the three ethnic groups. Most of the female patients and their relatives described the illness in terms of nerve problems/illness “moshkel asabi/bimari asabi” in the Persian and Kurdish language, and “ghalbim arir naraht de/asabam zeif lip” in the Turkish language, and depression “afMordehgi” in all the three languages. They spoke of nerve problems if they experienced somatic symptoms such as body pain, headache and stomach pain in addition to sadness and thinking too much; if the psychological symptoms, especially depressed mood, sadness and crying, predominated, they labelled it as depression “afMordehgi”. The severity of depression appeared to be categorized in terms of the severity and persistency of sadness and feeling blue. Other names, used by Turkish and Kurdish participants, were “darikhma”, (anxiety with heart pressure deep and sadness), and “tarjoman”, (sadness with nerve distress “narahty asabi” due to transient external events), respectively. In addition, some people in the three ethnic groups used personality characteristics, such as “sensitivity” to problems and being “anxious”, both as labels as well as cause of the problems.

A few female patients with Fars and Turkish backgrounds who had a history of admission to a mental hospital mentioned that their family called their illness madness. It was mentioned if they had been hospitalized several times and used medication for a long time without any improvement:

3) Effects of the illness: The data also show that the most important effects that our patients had experienced as a result of their illness was the loss of support from the spouse, a lower level of affection or separation from the spouse, marital conflict or a feeling of guilt originating from the patient’s inability to support her spouse. These effects was particularly emphasized by patients who had been referred a second time and who considered that the illness had become rather chronic. Other effects reported by relatives included seclusion, avoiding other people and an inability to handle family affairs. These issues were mostly mentioned by Turkish and Kurdish interviewees. Complaints stated by two of the patients’ spouses were desperation and unhappiness with the patient’s condition and ineffectiveness of the treatment “I loved him [her husband] when I married, but in this condition I hated him. He didn’t understand me and I felt bad about this issue. He did not pay attention to my need. He and I were getting far from each other day by day.” (depressed Fars women, divorced, 35-yr old) “…I really expect her function to be improved, and she could come back to normal life.” (spouse of Fars women, 42-yr old).

Discussion

The objective of this study was to present meaning of illness as part of explanatory models of illness, which expressed by clinically depressed female patients and their relatives in three largest ethnic groups in Iran, Fars, Kurds and Turks. However, before an in-depth discussion will be presented, it is relevant to mention that our analyses in the present study suggests that there are enough similarities between the models proposed by female patients and their relatives in the three ethnic groups (16, 17). As discussed in one of our previous papers (16), the reasons for these similarities may be explained by common cultural and social lay elements, such as a common official language and political structures, mass media and religion among the three ethnic groups in Iran (32). However, there were some differences in labelling the illness in Turkish and Kurdish participants. Turkish patients mostly used “darikhma”, and Kurdish patients, used “tarjoman.
**Fig. 1:** Categories and theme of main questions on concept of meaning depression and its causes among female patients and their relatives in three ethnic groups, Fars, Kurds, and Turks in Iran

- **Label of the illness:**
  - What female patients and their relatives called the illness?

- **Perceived symptoms:**
  - How female patients and their relatives attempted to describe the discomforts the patient has experienced?
  - How is the main cause of these discomforts (illnesses)?

- **Effects of the illness:**
  - In what ways depressed female patients and their relatives considered the illness had affected their lives?

**Theme Categories**

- **Illness meaning**

**Main Questions**

1. Transcribed and translated of recorded tapes
2. Achieve immersion and identified mining unit from the text
3. Initial coding of data based on explanatory model
4. Identification of theoretical themes
5. Developed coding scheme inductively
6. Development of provisional categories and subcategories
7. Exploration of relationship between categories
8. Refinement of themes, categories and subcategories
9. Incorporation of pre-existing knowledge

**Fig. 2:** Analysis steps of exploring explanatory model of depression in the three ethnic groups in Iran
Fig. 3: Categories and theme of main questions on concept of meaning depression and effects of illness among depressed women and their relatives in three ethnic groups, Fars, Kurds, and Turks in Iran

Concept of illness

We found that study participants in the three ethnic groups used the term nerve problems, nerve distress or depression to label the condition. Depressed women expressed psychological as well as somatic symptoms, but the latter predominated. This supports findings from earlier studies that depressed Asian, Indian and African people rarely cite psychological symptoms as their main complaints, but the latter predominated. This supports findings from earlier studies that depressed Asian, Indian and African people rarely cite psychological symptoms as their main complaints (10, 33, 34). The similar pattern also occurs among Caribbean people, who express their symptoms as low-spirited, weighed down or feeling low. They rarely use the terms sad or unhappy to describe their symptoms (35). The reason of somatisation might be that our studied female patients similar to South Asian women in Bhugra’s study (36) did not consider their psychological symptoms of an illness. Therefore, they did not appear to complain about them except when these symptoms became more severe or chronic. The most common somatic symptoms of depression in our study were pain, especially headache and musculoskeletal pain, accompanied by sadness. This finding is also supported by an earlier study, in Iran, which showed that common chief complaints in a public clinic in Tabriz (one of the cities included in the present study with Turkish ethnic background) were physical symptoms (73.4%) such as neck pain and “Daikhma” (37). It is also supported in other research outside Iran, which has shown that Asian people tend to somatise psychological distress as a cultural phenomenon (38). This may be due to stigma of mental illnesses, which makes patients reluctant to report their psychological distress to physicians (10, 39-40).
Cause of illness
Our study showed that most female patients, and their relatives, attributed the illness to external factors in their social world. Attributing depression to external factors is consistent with our study on Iranian lay people in three ethnic groups (Fars, Kurds and Turks) (16) as well as other studies on Australian, Japanese and Kenyan people, who believed in social causes such as difficult life events and circumstances, financial problems, and traumatic events (40-42). It might also be due to a trigger effect of social circumstances on mental health, especially for women (43). Gender is also considered to be an important factor in depression. In agreement with our findings, women are more at risk of marital conflicts, pressure and interference by in-laws (44).

Limitations
Patient selection was limited to patients who attended the public mental clinics; therefore, their attitudes may differ from those of patients in primary care or persons who have not been referred to psychiatrists. In addition, the relatives who were selected were those who were present in the clinics, and this limited the number of interviews with relatives of the patients. The interviews with individuals from the Turkish and Kurdish ethnicities were conducted in Turkish and Kurdish; some of the words and phrases such as labelling the illness or perceived symptoms were difficult to translate into Persian and English due to a lack of equivalent words or phrases in the target language; this has been a limitation in the presentation of results.

Although our pilot study (26) showed that different gender among the interviewers did not influence the results. Our main study used a female researcher to interview female patients to provide a comfortable environment to encourage female patients to talk.

Limited funding restricted this study into the three ethnic groups; these findings could differ if the study were conducted in other ethnic groups such as Baloch or Gilak in Iran or with the same ethnic groups who have migrant of different reasons to another country.

Conclusion and Implications
Our result showed that psychological and somatic symptoms were usually perceived as a transient reaction to external stressor. Therefore, mental health workers and professionals should receive appropriate training on the cultural perceived symptoms and labels of depressed women to be able to recognize depressive disorders according to expression of distress by patients. In addition, preferred approaches to treatment of the study participants could help professionals to choose appropriate and effective decisions about treatment that could be acceptable for patients and their relatives.

Ethical Considerations
Ethical issues including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, redundancy, etc. have been completely observed by the authors.

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