Barriers to treatment of substance abuse in developing countries

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Barrier, Treatment, Substance Abuse	Although drug abuse treatment is widely available in Iran, there is still a low utilization rate for users, and most substance users who need these services have never been in treatment. The aim of this study was to evaluate the barriers to treatment of substance abuse in Iran. In this cross sectional study, data was collected from the study population of a randomly selected by directly going to their home. Substance dependence was diagnosed by DSM-IVTR criteria in 500 persons and was assessed by Barriers to Treatment Inventory scale (BTI). Patients mean age was 42.41±8.92 year, most of them were illiterate (50.5%), married (75.2%). Major barriers were time conflict (52.6%), absence of problem (46.4%) and fear to treatment (42.35%). Negative social factors, fear to treatment, admission difficulty and privacy concern were significantly higher (p 0.004) in female while time conflict was higher in male population (p 0.002). This study demonstrated that there are several barriers, certain beliefs, social influences and obligations present in the study population.

Introduction

Participation in treatment has generally been associated with positive outcomes among substance abusers. To achieve these benefits, however, it is necessary for substance abusers to enter treatment in the first place a significant problem in many settings(1-2). Psychological characteristics of individuals, elements of their lifestyles, and treatment system factors may all serve as barriers to successful linkage with treatment.

Barriers to treatment are events or characteristics of the individual or system that restrain or serve as obstacles to the person receiving health care or drug treatment (3-4). Previous barrier studies have tried to identify the constructs of barriers to treatment. Operationalized the treatment barrier variables and identified five categories of the barriers construct: relationship, site-related aspects, cost, fear, and inconvenience (5-6). Identified four

factors with factor loadings of 0.40 or more, including interaction with others, aspects of treatment programs, social support, and financial concerns. Asking participants to rate barriers to, or reasons for, seeking treatment, produced a three-factor solution that reflected (a) privacy concerns, (b) participant beliefs that treatment was unnecessary or not beneficial, and (c) practical and economic obstacles to participation. However, these studies did not clearly and systematically classify treatment barriers as internal or external ones (7-8). Therefore, there is a need for greater conceptual clarity in the structure of barriers to treatment at both the theoretical and the empirical levels. Barriers to treatment can be conceptualized along internal and external dimensions (9-10). Previous studies defined internal treatment barriers as "subjective phenomena beliefs or perceptions arising from within the person" and external barriers as "health care system, structural characteristics of a program, and socio-cultural–environmental factors." Subjective (internal) sources of barriers included failure to recognize having a problem, fear of others' reactions, fear of stigma, and fear of the unknown related to treatment (11-12). Developing the Barriers to Treatment Inventory (BTI) to systematically assess both internal and external barriers among a pretreatment sample of substance abusers, demonstrated the presence of four internal barriers absence of problem, negative social support, fear of treatment, and privacy concerns as well as three external barriers time conflict, poor treatment availability, and admission difficulty(13-14). This study aimed at evaluating the barriers to treatment of substance abuse in Iran.

Methods

This cross sectional study was conducted on 2564 patients in special clinic, Tabriz from May 2011 to May 2013. This study was approved by local ethic committee. Written consent was obtained from all the patients. Sixty four people refused to participate in the study. The subjects were (1) > 18 yrs of age, (2) were diagnosed as having a substance dependence using criteria from the Diagnostic and Statistical Manual of Psychiatric Disorders (DSM-IV TR), (3) not having any psychotic disorder and (4) who were willing to participate in the study. The data was collected by visiting the houses, selected randomly and people were interviewed by the psychiatrists. Two performas were used to gather information from the subjects- (1) Identification data- to know the details of the individual, (2) Barriers to Treatment Inventory (BTI) questionnaires. BTI has good content validity and is a reliable instrument for assessing barriers to drug treatment. It includes 59 questions. Factor analysis identified by 25 items in 7 well-defined latent constructs: Absence of Problem, Negative Social Support, Fear of Treatment, Privacy Concerns, Time Conflict, Poor Treatment Availability and Admission Difficulty. The factorial structure of the barriers is consistent with the findings of other studies that asked substance abusers about barriers to treatment and is conceptually compatible with Andersen's model of health care utilization. Factors were moderately to highly correlated, suggesting that they interact with one another. Patients were asked to indicate on a five point scale includes: 1 = disagree strongly, 2 = disagree, 3 = uncertain, 4 = agree and 5 = agree strongly.

Statistical analysis

The factorial structure of the internal treatment barriers were verified and evaluated by exploratory and confirmatory factor analyses using SPSS 14.0 and the

structural equation-modeling software AMOS 5.0 (Analysis of Moment Structures). Extraction of factors was based on the minimum Eigenvalue and the amount of variance that was explained. Internal consistency of the items for each subscale of barriers was assessed by Cronbach's Alpha, which is also a measure of reliability of each construct. The structure invariance of internal barriers was tested by a series of confirmatory factor analyses (CFAs). Prior to extending CFA to test multi-group invariance across gender, ethnic, and age groups, the baseline model was tested separately for each group with no invariance constraints and then assessed to see if the model fit the data well. If models fit the data well, we conducted subsequent tests for multi-group invariance. Otherwise some further specifications would be needed. Fisher's exact test, Chi Square, Yates' correction where used and p value determination. P value <0.05 was considered to be significant.

Result and Discussion

Total no of 500 substance dependent patients were included in this study (20% of the study population). Among them 450 were male (90%) and 50 were female (10%). Their mean age was 42.41±8.92 year, most of them were illiterate (50.5%), married (75.2%). It was seen that in whole population, major barriers were time conflict (52.6%), absence of problem (46.4%) and fear to treatment (42.35%). Negative social factors, fear to treatment, admission difficulty and privacy concern were significantly higher (p 0.004) in female while time conflict was higher in male population (p 0.002). In comparatively younger (<30yrs) and the older (>55 yrs) people, absence of problem (54.32%, 47.76% respectively) was the main problem. Privacy concern and time conflict were

significantly higher barriers (p <0.05) in both the age groups of below 55 years in comparison to the age group >55 years. All the barriers except privacy concern and poor treatment availability, were significantly higher (p<0.001) in the illiterate population in comparison to both of the literate population. Absence of problem was significantly higher in married (p< 0.001) than the unmarried substance dependents while negative social factors and privacy concern were significantly higher in the unmarried group (p<0.001). Negative social factor, privacy concern and time conflict were significantly higher (p<0.001) in professionals in comparison to other occupational groups. The most prevalent barriers in alcohol dependent patients were absence of problem (56.8%) and time conflict (52.8%) while major opioid dependents had fear to treatment (86.2%). Tobacco and sedative dependents had absence of absence of problem as a form of the major barrier (56.8%, 74.7% respectively. Fear to treatment in opioid dependents was significantly higher (p<0.001), time conflict in alcohol dependents (p<0.001) in comparison to other groups of, while in case of other barriers, no significant differences between the groups could be found. In poly substance abusers, the major barrier was time conflict (52%). The substance dependents, taken treatment previously, had fear to treatment as a major barrier (82.6%) which was significantly higher (p<0.001) than the people not taken treatment. Substance dependents who had not taken treatment, identified absence of problem (54.8%) and time conflict (46.9%) as two major barriers which were significantly higher (p<0.001) than the people who had taken treatment before.

The results of this study indicate that different internal barriers are better viewed

as a multidimensional factor structure and that the internal factor structure of the barriers to treatment inventory is similar across independent samples of the same population of pretreatment substance abusers. These results would be interpreted in the light of socioeconomically and cultural perspectives. In our study we found that the barrier 'time conflict' predominated in the population followed by two barriers 'absence of problem' and 'fear of treatment'. People who are unaware about the treatment facilities/ having a bad past experience of treatment/ heard about other people's bad experiences, expressed their 'fear to treatment'. Regarding privacy, about one third of the patients showed their concern as they didn't like to talk in groups/ hate being asked personal questions/ didn't like to talk about their personal life to other people. However 'poor treatment availability' and 'admission difficulty' were barriers for 36.2% and 25.6% of the substance dependents, respectively. Jackson et al. in their study demonstrated that lack of motivation, poor support of parents and friends, lack of confidence in treatment system keeps the person away from getting treatment (15).

In general, enabling factors such as lack of financial resources or facilities for child care were much less important barriers to care than were individual predisposing factors including attitudes towards alcoholism treatment. In the study of Cunningham *et al.,* alcohol and drug users who entered treatment, tended to cite similar barriers reflecting embarrassment or pride, not wanting to share problems and the stigmatizing effects of treatment (16).

Female substance dependents had major problem with privacy, fear to treatment and absence of problem. Negative social factor was also present among two third of them,

which was significantly higher (p<0.004) than the male population, while majority of male had time conflict. There are only a few female substance abusers because of the Iranian culture where mostly society is male dominated and female gets less access and freedom to these substances. Intake of alcohol and other substances is somehow acceptable but if female take these, they would be socially isolated and would be immensely tortured. As female plays submissive role in most of the Iranian societies and don't get freedom like male, this finding was quite obvious according to the local culture. It also corroborates with the findings of Hettema *et al.,* who found that women had less favorable attitudes toward seeking general health care and perceived greater social reasons to be associated with alcoholism treatment.[17]

Almost half of the women experienced one or more problems because of entering treatment, such as problems with family, money or friends. Women encountered opposition to treatment from family and friends significantly more often than men, for whom such opposition was rare. Barrier as a form of absence of problem was a major problem for female, illiterate, married, in the age group <30 yrs and > 55 yrs, persons taking alcohol, tobacco, sedatives and who have never been treated. The second most common form of barrier was time conflict. Time conflict was a major barrier in male, age 30- 55 yrs, in both illiterate and studied >high school, both married and unmarried, in alcohol dependents, in poly substance dependents and in the patients who had taken previous treatment.

Negative social factor was most prevalent in professionals, subjects taking opioid. Fear to treatment was major barrier in female, illiterate, unemployed, opioid dependents and with previous history of treatment.

Privacy concern was more in female and in professionals. Admission difficulty was told only by the female and unemployed substance dependents. The barriers that influence health care utilization are "dynamic and recursive" and do not exist independently. Two observations about the barrier constructs illustrate this contention. First, each factor is comprised of items that make up different facets of a larger construct. For example, in Absence of Problem, both the substance abuser and the members of his social group may fail to see substance abuse as a problem (18-19).

Similarly, the three system factors—Time Conflict, Poor Treatment Availability, and Admission Difficulty—are made up of both individual and system-based items. This suggests that assessment professionals assessing barriers with their clients need to pinpoint the exact source of barriers (20-21). Furthermore, all of the barrier factors, except one, are significantly correlated. Although interaction and causal effects are not addressed in this study, a complex relationship between the barriers is likely. This serves as a reminder that potential clients need to make strategic decisions about what barriers to address and in what order. Careful planning may increase the effectiveness of barrier reduction strategies (22-23).

Conclusion

This study demonstrated that there are several barriers, certain beliefs, social influences and obligations in the population for which people can't take treatment. Social stereotypes and fear to treatment due to poor health services add further vulnerability. Minimization of the barriers should be done by changes in education, screening, outreach, detection, and referral patterns in alcohol & substance abuse treatment delivery systems.

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