

NEGATIVE PERCEPTION AND POOR AWARENESS AS RISK FACTORS TO THE DEFAULT OF DEPRESSION TREATMENT AMONG THE ELDERLY - A CASE CONTROL STUDY'

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Citation

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Abstract

Background: It is estimated that only a fraction among the elderly receive mental health care and large proportion of them default the treatment. AIM: The objective of the study was to determine the risk of defaulting depression treatment among the elderly patients who have negative perception and poor awareness of their illness. Methodology: this ethically conducted case control study using two controls in four major hospitals in northern Malaysia was conducted among elderly depressed patients who had defaulted treatment. Results: having an opinion of no family support (OR=6), having a perception that the family members do not think they have the illness (OR=3), negative perception (OR=10) and poor awareness of illness (OR=5) were found to be risk factors to defaulting depression treatment among the elderly Conclusion: these modifiable risk factors can be remedied by involving the patient and family members in the patient's treatment plan.

BACKGROUND

An obvious challenge to most countries in the 21st century is the ageing population. It is expected that in the next 50 years, the population of the elderly will increase to about 21%. In the developing world the elderly population is expected to increase to one and a half billion by the year 2050¹. The population of Malaysia is multiethnic. Majority are Malays followed by Chinese and Indians and other races. The past four censuses conducted in Malaysia have shown that the elderly population has been increasing and the younger population decreasing. It is expected that the elderly population will comprise ten percent of Malaysia's population by the year 2020. It is anticipated that 14.4% among the Chinese, ten percent Indians and almost eight percent among the Malays will be 60 years old and above by the year 2020².

The risk of certain illness increases with increasing age; it is the same for some psychiatric illness. In the United States of America, the burden of mental illness has been shown to equal cardiovascular diseases and cancer. It is estimated that 25% of those above the age of 65 have psychiatric disorders

including depression and the World Health Organization expects depression to be a major burden in the developing world³. In the United Kingdom the prevalence of depression is estimated to be around 25%⁴. Studies in Malaysia have shown the prevalence of depression to range from almost eight to 67%^{5,6,7}.

Depression is a serious psychiatric problem among the elderly⁸. Although depression is not a normal consequence of ageing⁹ but identifying depression in elderly can be difficult. Depression can lead to a decreased quality of life, burden the caregiver, community and the health services. Depression has also been associated with increased incidence of suicides among the elderly¹⁰.

Although treating geriatric depression has been shown to be effective¹¹, in one estimate only ten percent of the elderly who need psychiatric treatment receive medical care^{12,13} but 40 to 75% among those who receive treatment for depression, are not compliant¹⁴.

Among many other factors, patient's perception and awareness of illness has been strongly linked with the

default of depression treatment. Negative perception to treatment has an impact to receiving treatment¹⁵. Patient's perception to the cause of illness and the remedies especially superstitious beliefs and natural remedies has an impact on the patient's acceptance to treatment¹⁶. Poor awareness especially in chronic illness has been shown to be related to non compliance to treatment¹⁷. Poor awareness of illness along with denial and stigma has been associated with non compliance and default to treatment^{18,19,20}.

The main objective of this study was to determine the risk of patient's negative perception and poor awareness of illness to the default of depression treatment among the elderly.

MATERIALS AND METHOD

Background place of study: this study was conducted in four major government hospitals located in two northern states in Malaysia, namely Kedah and Penang. These hospitals provide in and out patient psychiatric health services and are staffed with psychiatrists, medical officers and other support staffs

Study Design: the study design was a case control study. Cases were defined as those who were 60 years of age and above who had defaulted follow up for more than a month from the follow up date in the outpatient psychiatric clinics of these four hospitals. Due to the shortage of subjects to fulfill the requirements of the sample size and to enhance the credibility of the study, two control groups were chosen. Control group 'A' comprised of depressed elderly (≥ 60 years old) patients on regular follow up and control group 'B' comprised of non depressed elderly (≥ 60 years old) patients on follow up for any other psychiatric illness in the psychiatric out patient clinics in these four hospitals. The study was conducted from July 2008 to July 2009

Sampling: The four hospitals were chosen due to the proximity of these hospitals to the researcher's place of occupation. Sample size was calculated using Epi Info version 13.3.2. using data variable from a study by Sirey et al conducted in USA in 2001.²¹ A total of 144 cases and 288 (144 subjects for each control group) controls were required. All cases and controls that fulfilled the inclusion criteria were identified from the hospital records. Subjects were called and appointments were made to interview them at their homes. Cases and controls were matched for sex, age and race.

Inclusion and exclusion criteria: all subjects aged ≥ 60 years

old listed in the psychiatric out patient records of the four hospitals where eligible. The exclusion criteria included those who refused to participate in the study, cannot communicate effectively and those untraceable.

Instruments: The researcher with the help of four trained research assistants collected the data using a questionnaire. Besides the baseline demographic information, the questionnaire included a scale to determine the respondents perception on the illness suffered. Five questions were asked and if more than half of the answers given were 'yes', the respondents were considered to have a negative perception towards their illness. The scale used for assessing the respondents perception to illness had a Cronbach's Alpha reliability score of 0.62. Another scale was used to determine the respondents awareness of illness. This scale had four questions. If less than half of the answers given were correct than they were considered to have poor awareness. The scale used for assessing the respondents perception to illness had a Cronbach's Alpha reliability score of 0.70.

Analysis: was done using SPSS version 13. Appropriate statistical tests were used to test the significance of the findings and odds ratio was calculated to determine the risk of defaulting treatment.

Ethics: the research was conducted ethically. All responders were asked to give an informed written consent before starting the interview. The anonymity of the responders is assured. The study had received the approval of the National University of Malaysia's ethics committee before the study commenced.

RESULTS

The response rate of this study was 86%. Out of the total 172 defaulters who were identified and eligible to be included in the study, 148 had agreed to participate. Each control group had 148 respondents making the total number of respondents as 444. Each group consisted of 58.1% (86) female and 41.9% (62) male. By race, Chinese made up the majority with 60.1% (89) followed by 28.4% (42) Malays and 11.5% (17) Indians. The main reason for non participation in the study was due to death, inability to locate the respondents and the respondents refusal to participate in the study.

DESCRIPTIVE ANALYSIS

Demographic description of the respondents is shown in table one. Most of the respondents were in the age group of

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60 to 70 years old, had the highest education level up to primary school, were married, unoccupied and had family members as their caregivers.

Figure 1

Table I: Demographics of the respondents

Variable	Cases N=148 n (%)	Control A N=148 n (%)	Control B N=148 n (%)
Age			
60 – 70	106 (71.6%)	120 (81.1%)	97 (65.5%)
71 – 80	36 (24.3%)	25 (16.9%)	42 (28.4%)
>=81	6 (4.1%)	3 (2.0%)	9 (6.1%)
Highest Level of Education			
illiterate	29 (19.6%)	13 (8.8%)	12 (8.1%)
Primary	76 (51.4%)	73 (49.3%)	84 (56.8%)
Secondary	40 (27%)	50 (33.8%)	32 (21.6%)
Tertiary	3 (2%)	12 (8.1%)	20 (13.5%)
Marital Status			
Married	111 (75%)	106 (71.6%)	97 (65.5%)
Divorced	32 (21.6%)	32 (22.3%)	35 (23.6%)
Bachelor	5 (3.4%)	9 (6.1%)	16 (10.8%)
Occupation			
Unoccupied	134 (90.5%)	103 (69.6%)	129 (87.2%)
Occupied	14 (9.5%)	45 (30.4%)	19 (12.8%)
Caregiver			
Family	124 (83.5%)	125 (84.5%)	129 (87.2%)
Neighbour/friend	6 (4.1%)	17 (11.5%)	2 (1.4%)
Old folks home	18 (12.2%)	6 (4.1%)	17 (11.5%)

Table two shows the descriptive analysis of the respondents opinion on family support and the respondents perception whether their family thinks they have the illness.

Comparatively more respondents from the case group were of the opinion that they did not have family support and similarly more respondents from the case group had the perception that their family members did not think that they had the illness they have been diagnosed with.

Figure 2

Table II: Respondents perception of family support and family opinion on respondents illness

Variable	Cases N=148 n (%)	Control A N=148 n (%)	Control B N=148 n (%)
Respondents opinion of family support			
Yes	83 (56.1%)	130 (87.8%)	133 (89.9%)
No	65 (43.9%)	11 (12.2%)	15 (10.1%)
Respondents perception whether family thinks he/she has illness			
Yes	108 (73%)	137 (92.5%)	129 (87.2%)
No	40 (27%)	11 (7.4%)	19 (12.8%)

Table three shows the respondents perception and awareness of illness. Most respondents in control group B did not feel that they had the illness they have been diagnosed with. Majority of the respondents from all three groups agreed that the treatment given to them was effective to treat the illness they had. Few of the respondents felt stigmatized by their illness although comparatively more were from the case group. More respondents from the case group believed that there was no treatment for their illness and that their illness will heal without any treatment.

Assessing the awareness of their illness, most of the respondents from all the groups knew the name of their illness. More respondents from control group 'A' knew what illness they had compared to the respondents from the case and control 'B' group. Fewer respondents from the case group thought it was important to comply with the treatment given compared to the two control groups. Most of the respondents from all the groups did not know how their illness could be treated.

Figure 3

Table III: Respondents perception and awareness of illness

Variable	Cases N=148 n (%)	Control A N=148 n (%)	Control B N=148 n (%)
Perception of illness			
Do you have the illness	72 (48.6%)	83 (56.1%)	43 (29.1%)
Treatment given can help	120 (81.1%)	137 (92.6%)	129 (87.2%)
Stigma	34 (23%)	14 (9.5%)	19 (12.8%)
No treatment for illness	80 (54.1%)	15 (10.1%)	24 (16.2%)
Illness will heal by itself	78 (52.7%)	14 (9.5%)	26 (17.6%)
Awareness of illness			
Correctly name illness	105 (94.6%)	112 (99.1%)	90 (95.7%)
Know about the illness	61 (41.2%)	115 (77.1%)	60 (40.5%)
Important to follow treatment	75 (50.7%)	145 (98%)	141 (95.3%)
Know how illness is treated	56 (37.8%)	54 (36.5%)	45 (30.4%)

RISK ANALYSIS

In order to assess the risk of defaulting treatment using odds ratio, control group ‘A’ was combined with control group ‘B’ to form a combined control group. As shown in table four, there is a six fold risk of defaulting treatment if the respondents are of the opinion that they do not have family support. Respondents who have the perception that their family members do not think they have the illness are three times more likely to default treatment.

Figure 5

Table V: Risk of defaulting treatment with respondents perception and awareness of illness

Variable	Cases N= 148 n (%)	Control N=296 n (%)	P value	OR (95% CI)
Respondents opinion of family support				
Yes	65 (43.9%)	33 (11.1%)	0.00	6.24 (3.84;10.15)
No	83 (56.1%)	263 (88.9%)		
Respondents perception whether family thinks he/she has illness				
Yes	40 (27%)	30 (10.1%)	0.00	3.26 (1.95;5.54)
No	108 (73%)	266 (89.9%)		

As shown in table five, there is a ten fold risk of defaulting treatment among respondents who have a negative perception of their illness as compared to those with a positive perception of their illness. Similarly there is an almost five fold risk of defaulting treatment among respondents who have poor awareness of their illness.

{ image:5 }

DISCUSSION

As there are only a few studies which have been conducted among the elderly to determine the risk factors involved in the default of depression treatment, the discussion in this segment will compare the finding of this study with other studies which have been carried out on default and non compliance to depression and other psychiatric illness treatment at all age groups.

Poor perception of illness has been shown to be a risk factor to non compliance to treatment²². A negative perception of illness can have a negative impact on the way a patient responds to treatment²³. In this study negative perception of illness has been shown to be a risk factor to defaulting treatment. A study by Adeponle et al²⁴ in Nigeria among psychiatric patients including those with severe depression showed that 77.7% of those who had defaulted treatment felt that they were cured or did not need treatment anymore. Similarly a study by Fleck et al²⁵ in 2002 showed that denial of illness was a main reason for being non compliant to psychiatric treatment. A study in India²⁶ had shown that patients who perceived that the medicine does not work were more likely to default treatment. Stigma has also been shown to be a risk factor for the default of psychiatric treatment in studies conducted in the west²⁷, the far east^{28,29} and Africa^{30,24}. In an interventional study by Skuse³¹, proper explanation of patient’s illness had helped change the patient’s perception of their illness and helped reduce psychiatric treatment default.

In this study poor awareness of illness was also identified as a risk factor for defaulting treatment. An interventional study conducted in the United States of America among depressed patients has shown that poor awareness can be a reason for defaulting treatment³². In another study in the USA among 1187 depressed patients on follow up in seven primary health centres showed that patients who were aware of their illness were more complaint to treatment. Similar findings were shown in a study conducted among the military servicemen on psychiatric treatment³³. Studies conducted in

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Pakistan³⁴ and India²⁶ among psychiatric patients has also shown that poor awareness is an indicator for non compliance to treatment. Studies among schizophrenic patients have also shown that poor awareness of illness is an important indicator for not complying with treatment^{35,36}.

Lack of patient and family involvement in the treatment plan can be a cause of poor awareness and negative perception of illness. Koch and Gillis³⁷ in their study among 136 psychiatric patients had shown that the reason for treatment rejection was because of the inadequate information given to the patients and their caregivers.

CONCLUSION

Negative perception and poor awareness of illness has been linked to the non compliance and default of psychiatric treatment in all age groups. This study has similarly shown that these risk factors are also associated with the default of depression treatment among the elderly.

SUGGESTION

These modifiable factors can be remedied by educating the patient and their family. One very effective method is by involving the patient and the family members in the treatment plan. This method has been shown to be effective in reducing negative perception and increasing the awareness in other psychiatric illnesses.

DECLARATION OF INTEREST

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