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Study of Depression in Nurses at the Universities of Medical Sciences Affiliated Hospitals in 2007

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Abstract: Depression with 15% prevalence in all in lifetime which occurs approximately in 25% of the women is the third common psychiatric disorder, with vast range of emotional, behavioral and somatic symptoms, typically leads to disorder of professional function, inter personal relationship and early occupational retiredness. This study was performed in order to determine the rate of depression in the nurses at education hospitals in Mazandaran townships in 2005. In this descriptive study, sampling was done randomly by simple method. Five hundred and four nurses were selected, Beck Depression Questionnaire containing 21 questions with score range of 0 to 63 was provided to the subjects under study.The depression score of 0 to 9 was considered as normal, 10 to 18 mild, 19 to 29 medium and 30 to 83 severe. Chi square and Spearman correlation tests were used for analysis of the obtained data.Among 504 subjects under study, 43.8% had no depression, 15.7% mild, 36% moderate and 14.5% severe depression. Related to two significant relationships were observed between sex and rate of depression (p=0.007); occur of main event in a last year and rate of depression (p=0.18%).Considering the prevalence of 14.5% depression in the nurses, screening and on time treatment is recommended.

Key words: Depression · Nursing student · Psychiatric disorders

INTRODUCTION

Depression is the third common psychiatric disorder with prevalence rate of 15% in life time and may occur approximately in 25% women. Majority of the patients are left untreated or the term of treatment is not completed and/or proper dose of drug is not taken. Therefore, depression becomes recurrent [1]. There is ancient writing on depression in many traditional medical books. Bograt used the term melancholy for description of depression About 100 years AC, Korelenlus selsos expressed depression due to black bile. Jol Fadereh called it recurrent psychosis in 1854, Karel Kalbam called it cyclotimic and termed recurrent depression in 1882 [2].

Different etiologies are described for depression, like neurotransmitters; in this condition level to serotonine, norepinephrin and dopamine declines. There is evidence of hypophisis hypothalamus involvement, because increase of cortisole and decrease of thyroid secretion and lack of growth hormone secretion in sleeping is observed. Genetic plays role in this disorder too. Life problems, improper social support, parents' death in child's adolescent age, physical conditions and some phychotic drugs lead to depression. From the psychodynamic point of view, such patients use more introjection defense mechanism [3]. Depression has wide range of symptoms, the main is transient followed by disappointment and the patient can't have any future plant, consequence is suicidal thoughts (60%) and attempting suicide (15%). The somatic symptoms are weight loss, sleeping and apetide disorders. Such patients complain of mental retarding and reduction of energy. Sexual desire diminishes and psychomotor disorder is demonstrated, as a result, onset of occupational dysfunction, impairment of self care and inter personal relationship occurs. The severe depression is together with indication of psychotic condition, in which hallucinatian and delusion with distinct symptoms of depression that is, inefficiency, feeling sin, disorder, deaths and begin punished [4].

Depression occurs in different forms such as, melancholic, chronic (more than two years) double (combination of dysthymic and major depression), seasonal dysthymic in elderly and the dysthymic [5].

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There are different diagnostic tests for depression, the best one is the interviewing diagnosis. Of course the physical illness and drug addiction must be rule out. The patient should not have hypothyroidism and hyper adrenal and presence of depression be confirmed for the time duration, severity of symptoms and effect on performance [2].

Beck Depression Questionnaire is used for evaluation of depression in the patient [6]. Depression can be treated. There are many antidepressant drugs used in control and treatment, combined with psychotherapy. It has been shown that 50% of the patients give properly response [2]. Karim Ollahi's (2000) report on 400 nurses at Ardbil University of medical sciences showed that 44.31% of the subjects have normal mode, 29.6% mild depression, 15.82% moderate and 10.76% with severe depression [7].

The studies Tolabi and Javadi based(2000) on Gss standard between Geriatrics showed: 34% Normal, 30% borderline depression, 22% Mild depression, 14% Moderate depression financial problems, retirement, Disease, Death of wife and other changes in life style may also effected in the rate and Increase of depression [8].

The studies by Siberian et al(2005) showed: 28.6% Depression between Semnan medical Science university workers, medical care workers highest percent (41%) and official workers lowest [9].

The studies by amani, et al(2003) showed 57.4% prevalence of depression between Ardebile Medical Science university students [4,10].

Considering the high prevalence rate of depression in nurses, its complications and different effects on individuals, family, society etc, the previous investigation necessitates further studies in this context. The aim of this study was to determine the prevalence rate of depression in the nurses at hospitals affiliated to the Mazandaran University of Medical Sciences.

MATERIALS AND METHODS

In this descriptive study, 504 nurses were selected randomly by simple method. Questionnaire was provided to the subjects for filling. The collected data were analyzed by SPSS using χ^2 and Spearman's Correlation test, value of $P< 0.05$ was considered significant.

The Research Tools Were as Follow: The questionnaire had two sections, the first for demographic information such as age, sex, marital status, number of children, type of service, work place, years of experiences, in come, accommodation, number of pregnancies, stressors in life time and education. The second section was the Beck Questionnaire Standard Test comprising of 21 multiple choice questions. Score range for determining depression was 0 to 63. Score 0 to 9, for normal; 10 to 18 mild; 19 to 21 moderate and 30 to 63 for severe depression.

RESULTS

It showed that 37.7% of the subjects under study were at the age range of 30 to 40 years, 58.1% female and 41.9% male; 57.3% married and 42.7% single or divorced.

Also 46.4% of the subjects had two children, 24.6% single children and 29% with three or more children. Meanwhile, 18.8% of them were trainee; 2.6% monthly and 31.6% annually contract employed and 47% of them were permanent employed.

Data indicated that 43.5% of the subjects had 5 to 15 years experience, 32.1% less than 5 years and 24.4% with more than 15 years.

It showed that, 51.4% of them had monthly income of 400 to 500$, 47.4% were the second child of the family, 44.6% had their own house, 51.2% of them experienced a main event in the last year and even 57.1% of them had Bachelor or master degree of nursing.

From the point of view factors related to depression, no significant relationship was observed between degree of depression and nurse's gender ($p=0.007$) and occur of main event in the last year ($p=0.018$). No significant relationship was observed between degree of depression and age ($p=0.112$), marital status ($p=0.393$), number of children ($p=0.768$), type of service ($p=0.605$), years of experience ($p=0.452$), work place ($p=0.592$), in come ($p=0.793$), birth order ($p=0.206$), accommodation ($p=0.433$) and educational degree ($p=0.252$)

Table-1 shows that 43.8% of the subjects under study did not have depression, 15.7% had mild, 26% moderate and 14.5% severe depression.

DISCUSSION

In this study, 43.8% had no depression, 15.7% mild, 26% moderate and 14.5% with severe depression.Clark.C,2007 showed the prevalence of depression 16.9% [2]. and Kaplan has defined the prevalence of depression in life time [6]. Considering the high prevalence rate of depression in the nurses,

Table 1: Frequency distribution and percentage of frequency in the context of variable and its relation with depression

		Degree of depression				Total		
Variable	Level of variable	Normal Number %	Mild Number %	Moderate Number %	Severe Number %	Number %	X-value	P-value
Age in years	<30	84 (16.7)	29 (5.8)	40 (7.9)	20 (4)	173 (34.3)		0.112
	30-4	83 (16.5)	34 (6.7)	46 (9.1)	27 (5.4)	190 (37.7)		
	>40	54 (10.7)	16 (3.2)	45 (8.9)	26 (5.2)	141 (28)		
Gender	Female	112	47 (9.3)	81 (16.1)	53 (10.5)	293 (58.1)	12.25	0.007
	Male	109	32 (6.3)	50 (9.9)	20 (4)	211 (41.9)		
Marital status	Married	125 (24.8)	51 (10.1)	71 (14.1)	24 (8.3)	289 (57.3)	6.58	0.393
	Unmarried	74 (14.7)	24 (4.8)	52 (10.3)	28 (5.6)	178 (35.3)		
	Etc.	22 (4.4)	4 (0.8)	8 (1.6)	3 (0.6)	37 (7.4)		
Number of children	1	30 (11.9)	11 (4.4)	15 (6)	6 (2.4)	62 (24.6)		0.768
	2	49 (19.4)	24 (9.5)	29 (11.5)	15 (6)	117 (46.4)		
	>3	39 (15.5)	9 (3.6)	16 (6.3)	9 (3.6)	73 (29)		
Type of employment	trainee	37 (7.3)	48 (0.8)	28 (5.6)	17 (3.4)	95 (18.8)	7.86	0.605
	Monthly	48 (0.8)	1 (0.2)	5 (1)	3 (0.6)	13 (26)		
	One year	48 (0.8)	22 (4.4)	45 (8.9)	18 (3.6)	159 (31.6)		
	Permanent	106 (21)	43 (8.5)	53 (10.5)	35 (6.9)	237 (47)		
Working experience in years	< 5	71 (14.1)	30 (5.9)	38 (7.5)	23 (4.6)	162 (32.1)		0.452
	5-15	91 (18.1)	30 (5.9)	68 (13.5)	30 (5.9)	219 (43.5)		
	> 15	59 (11.7)	19 (3.8)	25 (5)	20 (4)	123 (24.4)		
Monthy income	< 350000	53 (10.5)	25 (5)	30 (5.9)	22 (4.4)	130 (25.8)		0.793
	350000-450000	110 (21.8)	40 (7.9)	69 (13.7)	40 (7.9)	259 (51.4)		
	> 450000	58 (11.5)	14 (2.8)	32 (6.3)	11 (2.3)	115 (22.8)		
Order of children	First	59 (11.7)	17 (3.4)	36 (7.1)	15 (3)	127 (25.2)		0.206
	Second	93 (18.4)	37 (7.3)	68 (13.5)	41 (8.1)	239 (47.4)		
	Third and higher	69 (13.7)	25 (5)	27 (5.4)	17 (3.4)	138 (27.4)		
Type of accommodation	Owner	104 (20.6)	38 (7.5)	55 (10.9)	28 (5.6)	225 (44.6)	7.12	0.433
	Rental	90 (17.9)	28 (5.6)	48 (9.5)	30 (5.9)	195 (38.9)		
	Etc.	27 (5.4)	13 (2.6)	28 (5.6)	15 (3)	83 (16.9)		
Happening of main event in the last year	Yes	102 (20.2)	34 (6.7)	78 (15.5)	44 (8.7)	258 (51.2)	10.325	0.018
	No	119 (23.6)	45 (8.9)	53 (10.5)	29 (51.8)	246 (48.8)		
Education	Bachelor and master degree in nursing	118 (23.4)	44 (8.8)	84 (16.7)	42 (8.3)	288 (57.1)	9.04	0.252
	Post secondary high school certificate in anaesthesiology and operation	45 (8.9)	8 (1.6)	19 (13.8)	13 (2.6)	85 (16.9)		
	Secondary high school degree	58 (11.5)	27 (5.4)	28 (5.6)	18 (3.6)	131 (26)		

Table 1: Frequency distribution of sample based on the degree of depression

Degree of depression	Frequency	Percentage
Normal	221	43.8
Mild	79	15.7
Moderate	131	26
Severe	73	14.5
Total	504	100

screening test for diagnosis of depression and its beginning at time of treatment accompanied with follow up seems necessary.No significant relationship was observed between age and depression status in spite of believing that, with increase of age, rate of depression rises, Kaplan defined the mean age range of depression at 40 years [6].

No significant relationship was observed between age and depression. Therefore it was expected that rate of depression is higher at the advanced age. Kaplan's report indicated prevalence of depression at mean age of 40 years. [6,11]. Our study showed that there is relationship between sex and rate of depression. On other word, women are more susceptible to depression than men.Tolabi and Javadi, (2000) did not show significant relationship between sex and depression (8), but it is expected that it is two times more in women [2,6,12]. Therefore, diagnostic and treatment procedures and the required supports for prevention of depression in women seems more necessary. Marital status had no effect on depression rate, but Parish,(2008) showed the contrast [6,13]. Kaplan (2001) report indicated that depression is observed more in the divorced and those lacking inter personal relationship [6]. Number of the birth or children had no effect on depression. Type of the duty had no effect on depression. Barca,and *et al.* (2009) emphasized that the social supports in the work place has a reverse relation with job stress in the nurses and the chronic job stress has direct relationship with depression [14].

Duration of services had no effect on depression, Insignificant relationship was observed between work place and depression status, while considering the difference of job stress in different wards and hospitals, direct relationship between work place and depression was noticed [13,12]. Insignificant relationship between type of accommodation and depression was reported. Saberian,et al (2005) did not report any significant relationship between depression and type of accommodation [9]. Significant relationship was found between the rate of depression and occur of main event in the last year. Amani, (2004) showed that there is significant relationship between depression and presence of major mental and physical diseases in the family members and also occur of main events in the last year [4].

Kaplan believes that, dysthymic are those who facing more stressors [6]. Level of education had no effect on depression condition. Tolabi, *et al*. (2000) and Karimollahi, *et al.*, (2002)showed that there is indirect relationship between level of education and depression [8,7].

Kaplan believes that there is no relationship between social class and depression [6]. Therefore recommend that if services be rendered to those facing chronic or acute stressor or reduce environmental stressor and the concept of the individual be relalistic against stressor, helps in reducing onset of depression.

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