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Relationship between Job Satisfaction and Depression, Anxiety and Stress among the Female Nurses of Dhaka Medical College and Hospital, Bangladesh

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Abstract High workload, psychosocial stressors, physical labour, emotional labour, shift work and so on puts nurses at risk for short-term and long-term health problems, including sleep disorders, depression, psychiatric disorders, stress-related illnesses and illness in general. The context of Bangladesh is also not that different, since it has the lowest number of nurses in the sub-continent which results a staggering shortage. The main objective of this study was to find out the relationship between job satisfaction and depression, anxiety & stress among the female nurses in Dhaka Medical College and Hospital, Bangladesh. This cross sectional study was conducted among purposively selected 310 female nurses for the period of six months. A face to face interview through a semi structured questionnaire was applied to collect the data. The information about depression, anxiety and stress, and job satisfaction level, and socio-demographic factors and the presence of chronic illness was obtained through DASS 21, Minnesota satisfaction (Short form) and pre-tested questionnaire. A computer program "R" version was used for data analysis. The unadjusted association between each of categorical variable and stress, anxiety and depression were evaluated by chi square test. The associated factors of stress, anxiety and depression were estimated by multivariable logistic regression model. Moderate to severe level of stress, anxiety, and depression was experienced by 20%, 65%, and 40% of the nurses respectively at work. On the other hand, 80% of the nurses experienced normal stress at work whereas 35% and 60% of the nurses did not experience any anxiety and depression. In regards to job satisfaction level, 18%, and 35% of the nurses were satisfied, and dissatisfied with their job respectively. Job satisfaction level has a significant relationship with anxiety & depression but not with the stress. Low back pain and owning a house has been identified as significant variables for developing stress. The job satisfaction level and age group both have been observed as significant variables for depression and anxiety along with other factors. Due to shortage of man power, nurses are at high risk of developing mental disorder in Bangladesh. Therefore, proper interventions need to be placed for preventing this phenomenon to happen.

Keywords Job satisfaction, Depression, Anxiety, Stress, Nurse

1. Introduction

Job satisfaction is a thematic phenomenon that results in consistency in attitude and behaviour [1]. Job satisfaction includes various components including salary satisfaction, creativity, autonomy, and the nature of work, satisfaction with organizational and individual promotional policies, peer satisfaction, and satisfaction with continuing education opportunities [2]. Lack of manpower on the one hand and high work stress on the other hand, create professional stress which can affect work performance and job satisfaction [3]. The results of a study showed that dissatisfaction was created as a result of poor working conditions, lack of management support, inequality in the distribution of responsibilities, lack of resources, low wages and complex schedules and manpower shortages [4].

Nurse is one of the most demanding professions in the world and needs a lot of dedication and commitment to the job since their occupation is outstretched to hospitals, clinics, occupational health settings, long term care facilities, physician offices, private homes, and military services, and so on. Injuries and infection through workplace are very common among the nurses [5].The nurses are also at risk for violence, abuse and threats in the workplace [6]. In addition to this, physical and mental

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labour, shift work, high work load creates stress in professional life which can lead to various kinds of adverse attitudinal, behavioural, physical and emotional health consequences on nurses [7]. Occupational stress often causes nurses to change jobs, take sick leave, and even quit their jobs [8,9]. Apart from the pressures arising from occupations, the socio-demographic condition such as age has relation in developing mental condition towards nurses [10]. In addition to the age of nurses, gender and marital status show a relationship with the development of depression, anxiety, and stress. [11]. Since nurses are exposed to a wide range of potential stressors and situations, they suffer from severe psychological problems such as depression and anxiety [12,13]. This psychological and occupational distress negatively affects job satisfaction [14,15].

In Bangladesh, the ratio of the population-nurse, bed-nurse and Doctor-nurse is 5000:1, 13:1, and 2.5:1 respectively which is very poor according to the international standard [16]. Even Bangladesh has the lowest number of nurses in the sub-continent because both the number of nurses per 1,000 population and the nurse-to-Doctor ratio are the lowest in the world [16]. This is one of the major reasons of being too much stressed at work and consecutive mental health problems such as depressive illness [16]. Further, female worker are more likely to develop mental disorder such as depression, anxiety and stress than male due to double burden of work and separation from the children and family support [17]. Along with the gender, marital status, suppressing emotions and feeling unrewarded, and job related stress has also identified other common risk factors for depression, anxiety and stress [18,19]. Developments of psychological disorder towards nurses are evident to compromise their productivity and performance which results in providing lower quality of patient care [20,21].

In addition, work-related ill health and days off create an unwanted financial burden on both employees and employers. Stress related cost, including absenteeism, costing the Australian economy AU$14.81 billion a year, and directly costing employers AU$10.11 billion a year with total of 3.2 days lost per year [22]. It is estimated that the UK industry has to spend around £6.7 billion in lost income each year due to work-related stress and lost 10.8 million working days in 2010/11 [23]. There are no statistics on the financial cost of professional stress in Bangladesh, but it can be assumed that there are costs for society as well as individuals.

Keeping all the above factors in concern, this research attempted to provide a clear idea about the psychological state of the nurses working at the hospitals in Bangladesh and explain the associated factors that affect their emotional levels and causes depression, anxiety and stress in order to inform the respective authority to implement effective measures to improve the situation, reduce the loss and enable the nurses to provide better performance.

2. Material and Methods

This descriptive cross-sectional study was conducted to find out the relationship between job satisfaction and depression, anxiety & stress among purposively selected 310 female nurses at the Dhaka Medical College and Hospital (DMCH) which was lasted for 6 months (from April, 2018 to September, 2018). Sample size of the study was set by using a standard and validated equation [24]. All the female nurses regardless of their age, religion, race and designation were included in this study. On the other hand, male and pregnant and the reluctant nurses in participating this study were excluded. In this study, there were 51 items in the questionnaire. 10 items were related to socio-demographic and chronic illness status, 21 items were for depression, anxiety and stress, and 20 items for job satisfaction. In order to extract information about socio-demography and chronic illness, a pre-tested questionnaire was used. The age range of the participants in the questionnaire was determined based on the age limit (21-57 years) of government service in Bangladesh. Further, DASS (Depression, Anxiety and Stress Scale)-21 and Minnesota Satisfaction Questionnaire (MSQ)-short form was administered to collect data about depression, anxiety and stress, and job satisfaction from the participants. The Depression Anxiety Stress Scale 21 (DASS)-21, has been validated as a reliable self-administered psychological instrument consisting of 21 items in three domains where depression, anxiety and stress are assessed through seven items containing in each domain [10,11]. On the basis of the past 4 weeks, respondents were required to inform the experience of these symptoms on a 4-point Likert scale scoring from 0-3 (0: did not apply at all over the last week, 1: applied to some degree, or some of the time; 2: applied a considerable degree, or a good part of time; 3: applied very much or most of the time). The more severe the symptoms in each dimension, the higher the subscale scores. In this study, in case of depression, subscales score 0-13, 14-20 and 20+ was counted as normal, moderate and severe level respectively. Subscale score 0-9, 10-14 and 14+ was regarded as normal, moderate and severe level accordingly for anxiety. On the other hand, 0-18, 19-25 and 25+ subscale score was considered as normal, moderate and severe respectively in case of stress. As opposed to, MSQ short version has been proved as a validated tool for identifying employees' job satisfaction by several studies [25,26]. This version's items are rated on a 5-point Likert scale (1 "very dissatisfied with this aspect of my job", 2 "dissatisfied with this aspect of my job", 3"can't decide if I'm satisfied or dissatisfied with this aspect of my job", 4 "satisfied with this aspect of my job" and 5 "very satisfied with this aspect of my job"). In the present study, "very dissatisfied and dissatisfied" were considered as simply "dissatisfied", "can't decide if satisfied or dissatisfied" was regarded as "neither" and "satisfied and very satisfied" were considered as only "satisfied". This adaptation was created to facilitate the analysis of data and the understanding of findings easily. Item responses are summed or averaged to

create a total score – the lower the score, the lower the level of job satisfaction.

A face to face interview was conducted after the respondents' agreed through the consent form as a contract and as an understanding with the researcher. Prior to implement the main questionnaire, a pretested questionnaire was done by taking 10% of the sample population. After the necessary modification and correction of the questionnaire, and receiving approval from the ethics committee of North South University, Bangladesh, the main questionnaire was applied to the participants. The collected data was cleaned, separated and then entered in to the computer program. The "R" version was used for data analysis. Descriptive statistics were calculated for all of the variables, including continuous and categorical variables and presented through graph chart, pie chart and table. The unadjusted association between each of categorical variable and stress, anxiety and depression were evaluated by chi square test. The associated factors of stress, anxiety and depression were estimated by multivariable logistic regression model. The results were reported by odds ratios and corresponded 95% confidence interval (CI). Necessary permission was sought from the authority of Dhaka Medical College and Hospital (DMCH) and of Bangladesh Nursing Council before the data collection.

3. Results

Table 1 illustrates that among the participants, 77.42% were married and 22.58% were single. 43.23% of the nurses were from 21-30 age group, followed by 45.48% and 11.29% were from 31-40 and 41-57 age group respectively. 49.68% of the nurses have completed Diploma in Nursing whereas 33.55% completed B.Sc. in Nursing and 16.77% have completed MPH program. Among all the nurses, 51.29% had the family income of 50000- 100000, 33.55% earns more than or equal to 100000 and 15.16% earns less than or equal to 50000. In addition, 55.48% and 44.52% nurses had <= 4 and >4 family members respectively.72.90% nurses own a house and 27.10% do not have a house of their own. 61.29% nurses' were from rural area and 38.71% were from urban area. 51.94% nurses had suffered from lower back pain and 48.06% did not experience any lower back pain. 71.61%did not have diabetes whereas 28.39% were suffering from diabetes. Lastly, 74.19% did not have high blood pressure and 25.81% were suffering from high blood pressure.

The pie chart (**Figure 1**) below presents the department wise nurses' numbers in percentage. Of these, 25% of the nurses were from the surgery department, and 18% were working in the management division during the interview. Furthermore, 15% respondents were from the medicine department followed by 42% from other departments of the hospital.

Figure 2 illustrates that 20% of the nurses experienced moderate to severe level of stress at work while 80% of the nurses were at normal stress level. However, the bar chart shows 65% of the nurses experienced moderate to severe level of anxiety at work while 35% did not experience anxiety. In case of depression, majority of the nurses (60%) were not depressed where as 40% of them experienced moderate to severe level of depression.

Table 1. Socio-demographic and perceived physical status (n=310)

Variable		Frequency (%)
Age group	21-30 years	134 (43.23)
	31-40 years	141(45.48)
	41-57 years	35(11.29)
Marital Status	Married	240(77.42)
	Single	70 (22.58)
Educational Qualification	Diploma	154 (49.68)
	Bachelor	104(33.55)
	MPH	52(16.77)
Family Income	>=100,000	104(33.55)
	50,000-100,000	159(51.29)
	<50,000	47(15.16)
Number of Family members	>4	172(55.48)
	<=4	138(44.52)
Housing Status	House owner	226(72.90)
	Not owner	84(27.10)
Location of origin	Rural	190(61.29)
	Urban	120(38.71)
Lower back pain	Experienced	161 (51.94)
	Not-experienced	149(48.06)
Diabetes	Have	88(28.39)
	Not-have	222(71.61)
High blood pressure	Have	80(25.81)
	Not-have	230(74.29)

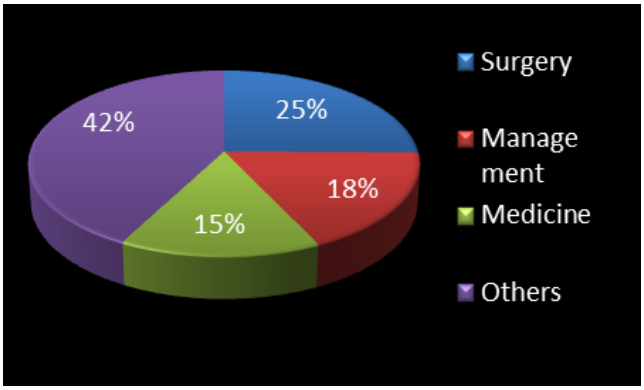

Figure 1. Percentage of nurses according to working department

Nurses' job satisfaction level is found from the **figure 3.** It shows 18% of the nurses were satisfied with their job while 35% of them were dissatisfied, and 47% of them were neither satisfied nor dissatisfied with their job.

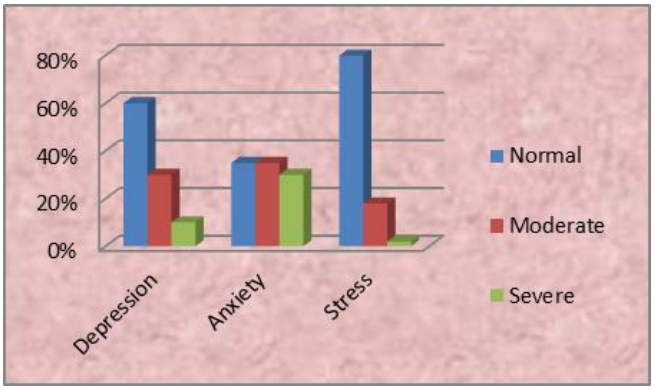

Figure 2. Percentage of different level of Depression, Anxiety, and Stress

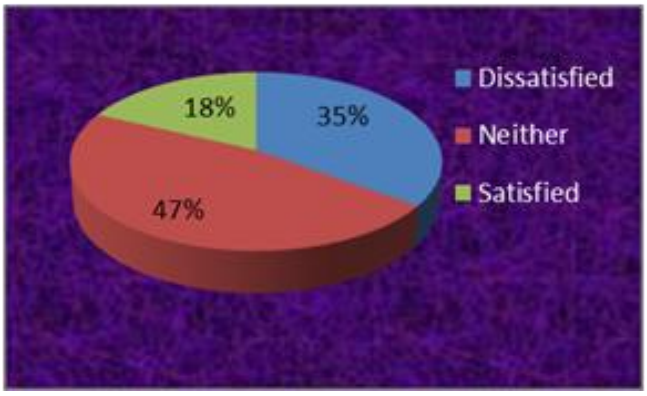

Figure 3. Percentage of job satisfaction level

Table 2 pictures nurse's characteristics and unadjusted odds ratio of each covariate for stress, anxiety and depression and **Table 3** shows the adjusted relationship between covariates and stress, anxiety and depression. From table-2, it is evident that low back pain and owning a house as significant variables for developing stress. Nurses who are in other departments (P value 0.05, OR=3.04, CI= 1.03-10.18) are 22.9% more likely to develop stress in compared to nurses working in management department. Again, nurses from the age group of 21-30 (P value 0.01 OR=0.37, CI= 0.16-0.83) are 79% less likely to develop stress compared to those who are from 31-40 age group. Researcher fit a multivariate logistic regression model with stress, anxiety and depression level after adjusting all the risk factors. Here in table 3, it is seen the adjusted odds ratio for stress level when owning a house. It reviews that with 95% confidence interval owning a house (P value 0.05 OR=2.44, CI= 0.99-6.32) is a significant variable. Again the odds ratio explains that the nurses who own a house have 2.44 times more chance to develop stress compared to the nurses who do not own a house (table 3). When nurses having low back pain, the adjusted odds ratio (OR) for stress level is given on the table 3. It reviews that, with 95% confidence interval having low back pain (P value= 0.05 OR=2.21, CI= 1.01-4.99) is a significant variable. Here, p value is found 0.05 which indicates a significant relationship between suffering from low back pain and developing stress at 5% significant level. Again, the odds ratio (OR) says that, the nurses who suffer from low back are 2.21 times more likely to have stress compared to the nurses who do not have low back pain. No significant relationship between job satisfaction level and stress was found from the analysis.

From table 2, it is noticed that job satisfaction level, department they work in, marital status and age group as significant variables for having anxiety. Nurses who are dissatisfied (p value= 0.03, OR= 0.78 CI= 0.36- 1.69) are 67.88% more likely to have anxiety compared to those who are satisfied. The odds ratio explains that, the nurses working in medicine department (p value= 0.007, OR= 4.73 CI= 1.57- 15.38) are 4.73 times more likely to have anxiety compared to the nurses who work in management department (table 3). Again considering marital status, the nurses who are single (p value= 0.02, OR= 2.78 CI= 1.16- 6.93) are 2.78 times more likely to have anxiety compared to the married nurses. In case of age group the adjusted odds ratio for anxiety is given in table-3 and it shows a significant relationship between age group 41-57 and having anxiety. Nurses who aged between 41-57 (p value= 0.02, OR= 0.31 CI= 0.11- 0.87) are 0.31 times more likely to have anxiety compared to the nurses aged 21-30. When monthly income >= 100000, the adjusted odds ratio for anxiety level given on table 3 shows that with 95% confidence interval monthly income >= 100000 (p value= 0.01, OR= 2.99 CI= 1.24- 7.36) is a significant variable in fact p value is found 0.01 which indicates a significant relationship between monthly income >= 100000 and anxiety at 5% significant level. Again the odds ratio explains that the nurses having family monthly income >= 100000 are 2.99 times more likely to have anxiety compared to the nurses who have month family income of <=50000.

Further, job satisfaction level, age group, owning a house and primary residence is identified as significant variables for having depression (Table 2). It is observed that nurses who are satisfied with their job (p value= 0.04, OR= 0.45 CI= 0.20- 0.96) are 0.45 times less likely to have depression compared to those who are dissatisfied (Table 3). In case of age group the adjusted odds ratio for depression is given in table-3 and it shows a significant relationship between age group 31-40 and having depression. Nurses who aged between 31-40 (p value= 0.01, OR= 0.40 CI= 0.19- 0.82) are 0.40 times more likely to have depression compared to the nurses aged 21-30. Again, it can say nurses aged 21-30 (p value= 0.04, OR= 0.33 CI= 0.11- 0.92) are 0.33 times less likely to have depression compared to the nurses of age group 41-60. In case of owning a house the p values is 0.01 which means it has a significant relationship with having depression (table 2). Nurses who own a house (p value= 0.01, OR= 2.55 CI= 1.20- 5.62) are 2.55 times more likely to have depression compared to those nurses who do not own a house.

Table 2. The nurse's characteristics and unadjusted odds ratio of each covariate for stress, anxiety and depression (n=310)

Variables	Categories	Stress		X^2 Value	P Value	Anxiety		X^2 Value	P Value	Depression		X^2 Value	P Value
		Moderate/ Severe	**Normal**			**Moderate/ Severe**	**Normal**			**Moderate/ Severe**	**Normal**		
Job Satisfaction Level	Dissatisfied	24	85	0.78	0.67	74	35	6.94	0.03	54	55	9.00	0.01
	Neither	28	118			99	47			57	89		
	Satisfied	9	46			27	28			14	41		
Department	Management	6	49	3.57	0.31	26	29	13.88	0.003	20	35	2.48	0.47
	Medicine	9	37			38	8			19	27		
	Others	30	101			84	47			49	82		
	Surgery	16	62			52	26			37	41		
Marital Status	Married	47	193	<0.0001	1	146	94	5.60	0.01	91	149	2.13	0.14
	Single	14	56			54	16			34	36		
Age Group	21-30	29	105	2.14	0.34	94	40	11.07	0.003	65	69	6.69	0.03
	31-40	23	118			92	49			49	92		
	41-57	9	26			14	21			11	24		
Education	BSC	22	82	3.02	0.22	72	32	2.75	0.25	45	59	0.91	0.63
	Diploma	25	129			99	55			58	96		
	MPH	14	38			29	23			22	30		
Monthly Income	<=50000	11	36	1.26	0.53	26	21	2.14	0.34	19	28	0.56	0.75
	>=100000	17	87			70	34			39	65		
	50-100	33	126			104	55			67	92		
Family Member	<=4	32	140	0.14	0.69	105	67	1.70	0.19	62	110	2.55	0.11
	>4	29	109			95	43			63	75		
House owner	No	10	74	3.75	0.05	48	36	2.31	0.12	26	58	3.68	0.05
	Yes	51	175			152	74			99	127		
Origin	Rural	34	156	0.71	0.39	119	71	0.56	0.45	67	123	4.69	0.03
	Urban	27	93			81	39			58	62		
Low Back Pain	No	22	127	3.80	0.05	93	56	0.39	0.53	58	91	0.13	0.71
	Yes	39	122			107	54			67	94		
Diabetes	No	45	177	0.06	0.79	142	80	0.03	0.84	93	129	0.58	0.44
	Yes	16	72			58	30			32	56		
High Blood Pressure	No	44	186	0.06	0.80	149	81	0.0009	0.97	94	136	0.04	0.84
	Yes	17	63			51	29			54	55		

Table 3. The adjusted relationship between covariates and stress, anxiety and depression

Variable	Reference	Stress			Anxiety			Depression		
		OR	CI	P-Value	OR	CI	P-Value	OR	CI	P-Value
Satisfaction Level - Neither	Dissatisfied	0.82	0.42 - 1.58	0.55	0.97	0.55 – 1.73	0.94	0.66	0.39 – 1.12	0.13
Satisfaction Level - Satisfied	Dissatisfied	0.98	0.37 – 2.42	0.97	0.78	0.36 – 1.69	0.53	0.45	0.20 – 0.96	0.04
Department – Medicine	Management	3.04	0.80 – 12.38	0.10	4.73	1.57 – 15.38	0.007	0.70	0.25 – 1.93	0.50
Department – Others	Management	3.04	1.03 – 10.18	0.05	1.88	0.81 – 4.37	0.13	0.63	0.27 – 1.48	0.29
Department – Surgery	Management	2.46	0.72 – 9.18	0.16	1.81	0.69 – 4.77	0.22	0.79	0.30 – 2.04	0.63
Age – 31-40	21-30	0.37	0.16 – 0.83	0.01	2.78	1.16 – 6.93	0.02	1.51	0.67 – 3.50	0.32
Age – 41-57	21-30	0.92	0.29 – 2.81	0.88	0.79	0.38 – 1.60	0.51	0.40	0.19 – 0.82	0.01
Highest education – Diploma	BSC	0.54	0.27 – 1.12	0.09	0.31	0.11 – 0.87	0.02	0.33	0.11 – 0.92	0.04
Highest education – MPH	BSC	1.36	0.58 – 3.13	0.46	0.81	0.41 – 1.55	0.52	0.91	0.49 – 1.68	0.77
Monthly Income – >=100000	<=50000	0.47	0.16 – 1.34	0.15	0.62	0.28 – 1.35	0.22	1.17	0.55 – 2.48	0.67
Monthly Income – 50-100	<=50000	0.60	0.24 – 1.48	0.26	2.99	1.24 – 7.36	0.01	0.73	0.31 – 1.74	0.48
Family Members – >4	<=4	1.08	0.59 – 1.97	0.79	1.64	0.75 – 3.54	0.20	0.89	0.41 – 1.91	0.77
House owner - Yes	No	2.44	0.99 – 6.32	0.05	1.24	0.73 – 2.09	0.41	1.37	0.84 – 2.24	0.20
Origin– Urban	Rural	1.08	0.58 – 2.00	0.78	1.74	0.81 – 3.83	0.15	2.55	1.20 – 5.62	0.01
Low Back Pain – Yes	No	2.21	1.01 – 4.99	0.05	1.04	0.61 – 1.78	0.87	1.44	0.87 – 2.38	0.14

4. Discussion

Nursing is considered as a stressful profession in all countries around the world. They have to go through huge workload, physical and emotional labour, shifting duties, environmental and workplace hazards and so on. Therefore, this is the community who are always more vulnerable to physical and mental health problems. A lot of studies showed that a major number of the nurses are suffering from psychological problems such as anxiety, stress and depression. In general, this study aimed to find out the relationship between job satisfaction and depression, anxiety and stress among the female nurses in Dhaka Medical College and Hospital (DMCH), Bangladesh. More specifically, it sought to determine the prevalence and levels of depression, anxiety, and stress in the female nurses at DMCH, as well as to identify whether there was a link between depression, anxiety, and stress with the socio-demographic status and chronic illness.

A study done in 2015 in five hospitals of Dhaka city showed that 37.5% of nurses had depressive illness [27]. Here in this study, it is found that 40% of the nurses have moderate to severe level of depression which is similar to the previous study result. As a result, it is a matter of concern for the nurses of our country; to add more, this depressive illness ultimately affects the patient care service which is totally unexpected.

Again, current study presents that only 18% of the nurses are satisfied with their job, whereas 35% are dissatisfied and 47% have neutral opinion about their jobs. Thus, it is evident that job satisfaction is a significant factor to work on, hence improve mental health. As it has strong relationship with having anxiety and depression. Likewise, study carried out in South Africa on nurses from four hospitals showed that staff issues are best associated with burnout as well as job satisfaction [8]. Therefore, working environment, interrelationships of the nurses and with their supervisors, working hours- these are all important factors which should be improved.

Another research work on nurses in Hong- Kong shows that prevalence of depression, anxiety and symptoms of stress is 35.8%, 37.3% and 41.1% accordingly [28]. Whereas the percentages of these are 40%, 65% and 20% respectively in the present study. Hence, it's clear that the percentage of anxiety and depression among nurses are more in our country, while stress percentage is a bit conflicting because another study also reported that almost all of their participants (nurses) felt stressed by nursing-related tasks [9]. Further conduction of studies is needed to get a more clear view and associations.

However, this study found that age group and hospital unit/ department work are two other vital factors which have huge impact on the mental health of the nurses. Aged nurses are more prone to have anxiety and depression that being the case; appropriate care and measures should be taken on this regard to provide a better hospital service and better treatment to the patients. Again, coming to departments in which nurses work have a massive impact on their emotional state, as the workload, intensity and process varies from department to department. Present research found that the nurses working in medicine department (p value= 0.007, OR= 4.73 CI= 1.57- 15.38) are 4.73 times more likely to have anxiety compared to the nurses who work in management department. A previous study revealed that age, duration of work and hospital unit work; these three factors have significant effect on the emotional states of the nurses [29]. Moreover, another research showed that working in operating room is associated with fatigue, working in ICU (Intensive Care Unit) is associated with anxiety and working in surgery and internal medicine is associated with anxiety and depression [30]. Hence, this study upholds the similar results which come to the point that further detailed investigations and studies should be carried out to find out precise results; consequently appropriate steps towards solving these issues can take place.

Furthermore, marital status and owning a house are the factors which can have impact on the nurses' emotional state on the basis of this study. The nurses who are single (p value = 0.02, OR= 2.78 CI= 1.16- 6.93) are 2.78 times more likely to have anxiety compared to the married nurses. In contrast to this finding, no significant relationship between marital status and stress maker factors among nurses was found in a cross-sectional study conducted in Iran [31]. Again, the nurses who have family monthly income of more than 100000 BDTK are seen to have anxiety. Therefore, these factors should be studied more in depth to find out the associations.

Current research didn't find any association of high blood pressure, diabetes and academic qualification with emotional states of the nurses but they are suspicious of having some sort of association; therefore further investigations should take place. Last but not the least, this study did not find job satisfaction level as a significant variable for having stress, which is questionable. Hence, further research is recommended to find out more on this regard.

5. Limitations

The findings should be considered in the context of its limitations. The current study was conducted only at a hospital in Dhaka city; therefore, the findings may not be generalized across the country. In addition, recalling bias may be one of the concerns especially when respondents were asked about the chronic illness. Further, since it is a cross-sectional study, the associations found in this study may weakly mean the causal relationship.

6. Conclusions and Recommendations

Job satisfaction level has a significant relationship with anxiety & depression. As no strong relationship was found between stress and job satisfaction level, further investigation is needed in the regard. However, it is found

that low back pain and owning a house can contribute to increase stress among nurses. Therefore, treatment and workplace posture awareness should be introduced at the hospital to reduce low back pain. Department which they work in; marital status and age group are the factors which have association with anxiety level among the nurses. Again, older age groups of nurses are more prone to have depression. As a consequence, to prevent this they should get psychological help or support. Further research can be done to find out more detailed information about their psychological health and to determine the workplace factors or hazards that affect the nurses intensely. Studies can also be done to find out which hospital departments have more workload or pressure, so that necessary steps can be taken on that regard.

As low back pain is a significant variable for having stress, nurses should be given training on workplace posture awareness because they have to do various sorts of work during the duty time starting from lifting heavy things to sitting for long hours. They can also be trained for some light physical exercises or activities which they are able to perform even at work. The concerned authorities are requested to take necessary steps for increasing job satisfaction level of nurses which in turn will improve their mental health. Therefore, in-depth studies related to improving job satisfactions level are needed to carry out. Another vital step is to make the nurses aware of the importance of mental health, additionally to prepare them so that they can seek help, support or consultation if needed. They should be well trained to deal with the stress, anxiety and depression which are very common terms when it comes to nursing profession. Older nurses should be given sufficient attention, care and support at the hospital because they found to be more vulnerable to anxiety and depression.

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