

ORIGINAL ARTICLE

Prevalence of Anxiety, Depression and Job Dissatisfaction Among Healthcare Professionals: A Comparative, Cross-sectional Study in Bangladesh

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Abstract

Background: Healthcare professionals are more likely to have the anxiety and depression that may affect the wellbeing and workforce sustainability. **Objective:** To find out the prevalence of anxiety, depression and job dissatisfaction among Bangladeshi healthcare professionals.

Methods: This comparative, cross-sectional study was conducted on 600 participants – 402 healthcare professionals as cases and 198 non-healthcare workers as controls. Physicians (120), nurses (122) and pharmacists (160) were included as healthcare professionals. A semi-structured questionnaire was developed. General Anxiety Disorder-7 (GAD-7) was used to measure anxiety, while Patient Health Questionnaire-9 (PHQ-9) scale was used to determine the severity of depression. Job dissatisfaction was assessed by Employee Satisfaction Index (ESI) with slightly modification.

Results: A higher prevalence of anxiety (mild:40.80%, moderate:13.93% and severe:14.43%), depression (mild:40.30%, moderate:18.91%, moderately severe:11.94%, and severe:3.98%) and job dissatisfaction (22.39%) were observed among healthcare professionals than in non-healthcare workers. Elevated risk of the occurrence of mild ($p=0.009$) and severe ($p=0.002$) anxiety, mild ($p<0.001$), moderate ($p=0.001$) and moderately severe ($p=0.006$) depression were also observed in healthcare professionals. Based on score, the higher risk of anxiety ($p<0.001$), depression ($p=0.019$) and job dissatisfaction ($p<0.001$) were recorded in pharmacists compared with that of physicians and nurses. A significant association of anxiety and depression with job dissatisfaction was also explored only in pharmacists. Besides, gender and job-experience of the professionals contributed to the anxiety and depression ($p<0.05$). **Conclusion:** Bangladeshi healthcare professionals, particularly pharmacists, had the higher rate of anxiety, depression, and job dissatisfaction. However, more research with a large sample size is required to validate our study.

Keywords: Anxiety, depression, job dissatisfaction, healthcare professionals

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INTRODUCTION

Anxiety and depression are the most prevalent mental disorders globally¹. Anxiety is typically characterized by weariness, palpitations, fear, and restlessness². Suicidal thoughts, low self-esteem, and a noticeable and persistent pessimism are the symptoms of depression disorder³. In addition, the clinical indicators of depression include a

decrease in energy, focus, and interest. Feelings of guilt and worthlessness, self-blame, appetite and sleep disorders and depressed mood can all be regarded as critical clinical indicators to diagnose depression⁴. Prior research revealed that there was a considerable risk of anxiety and depression among medical professionals⁵. Anxiety and depression symptoms are present in roughly 33–50% and 26–60% of healthcare

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workers worldwide, respectively⁶. Furthermore, there is a correlation between anxiety and depression a number of medical issues, including exhaustion, vertigo, nausea, vomiting, disturbed sleep, and spasms in the muscles⁷. Consequently, they have an impact on job turnover, absenteeism, and the intention to resign. Besides, these mental illnesses can worsen poor performance, impaired judgement, and in extreme situations, even increase the risk of occupational accidents among healthcare workers⁸.

Healthcare workers' job satisfaction positively correlates with patient satisfaction and plays a role in maintaining continuity of care⁹. Numerous studies have shown that healthcare providers' attitudes towards their jobs vary. Results differed; some studies showed job satisfaction, while others revealed unsatisfied healthcare professionals⁹⁻¹¹. To our knowledge, there was no such research or reports that addressed job dissatisfaction as well as mental health problems among healthcare professionals in Bangladesh. Therefore, this study was undertaken to explore the comparative scenario of anxiety, depression and job dissatisfaction among different groups of healthcare professional including physicians, nurses and pharmacists as well as between healthcare and non-healthcare professionals in Bangladesh.

METHODS

This comparative, cross-sectional study was conducted among healthcare professionals working at various healthcare institutions and pharmaceutical companies in Bangladesh, between October 2023 and March 2024. In addition, non-healthcare professionals from a variety of professions, including bankers, engineers, teachers, and other corporate employees, were also recruited for the current study as controls. A total of 600 participants were surveyed, of whom 402 were healthcare professionals (cases) and 198 were non-healthcare professionals (controls). Physicians (120), nurses (122) and pharmacists (160) were included as healthcare workers. Physicians who completed at least MBBS degree and graduate pharmacists were included in the study. Physicians and pharmacists were identified by their registration number provided by the respective regulatory body in Bangladesh. Nurses were recognized by their identity card provided by their employer. After carefully examining relevant

literature, the questionnaire was developed. GAD-7, or General Anxiety Disorder-7, was used to measure anxiety¹². The GAD-7 score divided anxiety into four categories: normal (0-4), mild (5-9), moderate (10-14), and severe (15-21). By using the Patient Health Questionnaire-9 (PHQ-9) scale, the severity of depression in this case was determined¹³. According to the score of PHQ-9, depression was categorized into five levels such as normal (0-4), mild (5-9), moderate (10-14), moderately severe (15-19) and severe depression (20-27). Job dissatisfaction was assessed by following Employee Satisfaction Index (ESI) with slightly modification¹⁴. The lower the score of this index, the higher the dissatisfaction level. Job dissatisfaction was categorized into dis-satisfied (0-3.33), neutral (3.34-6.66) and satisfied (6.67-10) level based on the obtained score.

Both in-person interviews and online Google forms were used to collect data. The targeted subjects, who were reachable and available, were given the questionnaires along with a written consent form that guaranteed their confidentiality and described the aim of the study. However, since doctors and graduate pharmacists have the necessary knowledge to comprehend the questionnaire, we sent the online Google form link via email or WhatsApp to them who practice in remote areas. All collected data were rearranged in the Microsoft Excel 2010. Comparative analysis of anxiety, depression and job dissatisfaction was done between healthcare and non-healthcare professionals as well as between a specific group of healthcare professional and the total number of other healthcare professionals. To investigate the prevalence risk, odds ratios (OR) with 95% confidence intervals (CI) were computed. P values were determined using the chi-square (χ^2) test. A significant alpha level was defined as 0.05 or less. Statistical Package for the Social Sciences (SPSS) software version 27.0 for the Windows and Microsoft Excel 2010 were used for the analysis.

RESULTS

Demographic and professional profile of participants: Over half of the professionals working in the healthcare and non-healthcare fields were either under 30 years old or 30 years old (56.22% and 51.52%, respectively). Among healthcare workers, the percentage of female employees was higher (47.26%) than among non-

healthcare workers (33.84%). Individuals who were overweight or obese, based on BMI, made up 20.90% and 5.47% of healthcare workers and 21.21% and 8.08% of non-healthcare workers. The majority of professionals working in the healthcare and non-healthcare sectors (74.13% and 73.23%, respectively) were married. The present study recruited physicians, pharmacist and nurses as the percentage of 29.85%, 39.80% and 30.35%, respectively of healthcare individuals. Almost all of participants from both healthcare and non-healthcare workers were working in private organization (87.56% and 85.35%). Around 50% of both healthcare and non-healthcare participants had 2 years or less than 2 years of job experience (54.23% and 47.98% respectively) (Table 1).

Comparative scenario of the prevalence between healthcare and non-healthcare professionals:

The present study demonstrated the greater percentage of healthcare professionals in all categories of anxiety including mild (40.80%), moderate (13.93%) and severe anxiety (14.43%) level than the percentage of non-healthcare workers (33.84%, 12.63% and 10.10% respectively) (Table 2). Besides, healthcare professionals had significantly higher risk of the prevalence of mild (OR=1.70, CI=1.14-2.52, $p=0.009$) and severe (OR=2.01, CI=1.13-3.58, $p=0.002$) category of anxiety. Based on the anxiety score, the risk was also higher in healthcare workers. But the result was not statistically significant (OR=1.35, CI=0.91-2.00, $p=0.142$) (Table 3). It was found that healthcare workers (cases) had higher rates of depression than non-healthcare workers (controls). While 44.44% of controls had their anxiety scores graded to a normal level, only 24.88% of cases had this status. In comparison to the percentage of controls (28.79%, 14.14%, 9.09, and 3.54%, respectively), the current study found a higher percentage of cases in mild (40.30%), moderate (18.91%), moderately severe (11.94%), and severe depression (3.98%) (Table 2). Comparing cases to controls, it was found that there was an upward risk of mild (OR=2.50, CI=1.65-3.80, $p<0.001$), moderate (OR=2.39, CI=1.42-4.02, $p=0.001$), and moderately severe (OR=2.35, CI=1.27-4.33, $p=0.006$) depression in cases. Similar result was also observed when estimating depression using the depression score (OR=1.46, CI=1.00-2.12, $p=0.005$) (Table 3). Besides, a higher percentage of healthcare professionals (22.39%) than non-healthcare professionals (13.64%) expressed job

dissatisfaction (Table 2). There was a significant difference in job dissatisfaction when compared based on the obtained job satisfaction score (OR=1.52, CI=1.07-2.15, $p=0.02$); however, the current study did not find any significant difference in job dissatisfaction between healthcare and non-healthcare individuals when compared between different levels of job satisfaction (OR=1.49, CI=0.90-2.48, $p=0.120$) (Table 3).

Comparative scenario of the prevalence between different groups of healthcare professionals:

Anxiety in pharmacists was found to be more prevalent among healthcare professionals (Table 2). Just 13.75% of pharmacists had their anxiety scores graded to a normal level, compared to 40.00% and 44.26% of physicians and nurses who had normal anxiety scores. In addition, 26.25% of pharmacists reported having severe anxiety, compared to 3.28% of nurses and 10.00% of physicians. According to the study, 45.0% and 5% of physicians, 42.5% and 17.5% of pharmacists, and 40.80% and 13.93% of nurses reported having mild to moderate anxiety. Alike anxiety, depression was also more prevalent in pharmacists than physicians and nurses, because of the smaller percentage of pharmacists (17.50%) compared to the percentage of physicians (33.33%) and nurses (26.23%). About 40% of physicians, 37.5% of pharmacists and 44.26% of nurses reported the mild grade of depression. Moderate level of depression was identified in 15.00% of physicians, 18.75% of pharmacists and 22.95% of nurses. However, the highest percentage of pharmacists suffered from moderately severe depression (22.50%). Severe depression was also found in 5.00% of physicians, 3.75% of pharmacists and 3.28% of nurses. Moreover, job dissatisfaction was more common in pharmacists. Around 36.25% of pharmacists obtained the score graded to dissatisfaction with their job compared to the 21.67% of physicians and 4.92% of nurses.

Comparative risk study among different groups of healthcare professionals:

The comparative risk of the development of anxiety, depression and job dissatisfaction is represented in Table 4.

Pharmacists (cases) vs. physicians + nurses (controls): Based on reported score, a significantly higher risk of anxiety (OR=3.5, CI=2.23-5.50, $p<0.001$) and depression (OR=1.62, CI=1.08-2.42, $p=0.019$), were noted in pharmacists compared with that of physicians and nurses. Moreover, job dissatisfaction risk among pharmacists was also

significantly higher based on ESI obtained score (OR=2.3, CI=1.53-3.46, $p<0.001$).

Physicians (cases) vs. pharmacists + nurses (controls) and Nurses (cases) vs. pharmacists + physicians (controls): Using the reported score as a basis, the current study calculated the reduced risk of anxiety (OR=0.34, CI=0.20-0.60, $p<0.001$) and depression (OR=0.59, CI=0.37-0.94, $p=0.026$) in physicians compared with other healthcare professionals (Table 4). Besides, when nurses were compared with physicians and pharmacists, they had lower risk of anxiety (OR=0.59, CI=0.36-0.98, $p=0.04$) and job dissatisfaction rate (OR=0.50, CI=0.32-0.78, $p=0.002$).

Association of anxiety and depression with job dissatisfaction in healthcare professionals: The study only found a strong association of anxiety and depression with job dissatisfaction among the pharmacists (OR=2.23, CI=1.16-4.31, $p=0.017$ and OR=2.17, CI=1.13-4.17, $p=0.019$, respectively) (Table 5). However, no correlation between them was explored in case of nurses and physicians.

Impact of gender, age and job experience in anxiety, depression and job dissatisfaction: Compared to females, males had lower levels of anxiety (OR=0.61, CI=0.40-0.94, $p=0.026$) but higher levels of depression (OR=2.09, CI=1.38-3.18, $p=0.000$) (Table 6). Males were less likely than females to be dissatisfied with their jobs (OR=0.53, CI=0.36-0.80, $p=0.002$). The study failed to find any correlation between healthcare

professionals' depression levels and age. Besides, healthcare workers with over three years of experience experienced higher anxiety rates in the event of job dissatisfaction than other professionals (OR=1.86, CI=1.19-2.89, $p=0.006$) (Table 6).

Table 1: Demographic and professional characteristics of participants

Variables		Healthcare N = 402 (%)	Non-Healthcare N = 198 (%)
Age	Below 30 years	226 (56.22)	102 (51.52)
	Above 30 years	176 (43.78)	96 (48.48)
Gender	Male	212 (52.74)	131 (66.16)
	Female	190 (47.26)	67 (33.84)
BMI	Underweight	18 (4.48)	5 (2.53)
	Normal	278 (69.15)	135 (68.18)
	Overweight	84 (20.90)	42 (21.21)
	Obese	22 (5.47)	16 (8.08)
Marital Status	Married	298 (74.13)	145 (73.23)
	Unmarried	104 (25.87)	53 (26.77)
Profession	Physicians	120 (29.85)	NA
	Pharmacist	160 (39.80)	NA
	Nurse	122 (30.35)	NA
Job Types	Government	50 (12.44)	29 (14.65)
	Private	352 (87.56)	169 (85.35)
Job Experience	< 2 years	218 (54.23)	95 (47.98)
	2-5 years	112 (27.86)	81 (40.91)
	> 5 years	72 (17.91)	22 (11.11)

HP: Healthcare Professionals; Non-HP: Non-healthcare Professionals

Table 2: Prevalence of anxiety, depression and job dissatisfaction in participants

Variables		Physicians N = 120 (%)	Pharmacists N = 160 (%)	Nurses N = 122 (%)	Total HP N = 402 (%)	Non- HP N = 198 (%)
Anxiety	Normal	48 (40.00)	22 (13.75)	54 (44.26)	124 (30.85)	86 (43.43)
	Mild	54 (45.00)	68 (42.50)	42 (34.43)	164 (40.80)	67 (33.84)
	Moderate	6 (5.00)	28 (17.50)	22 (18.03)	56 (13.93)	25 (12.63)
	Severe	12 (10.00)	42 (26.25)	4 (3.28)	58 (14.43)	20 (10.10)
Depression	Normal	40 (33.33)	28 (17.50)	32 (26.23)	100 (24.88)	88 (44.44)
	Mild	48 (40.00)	60 (37.50)	54 (44.26)	162 (40.30)	57 (28.79)
	Moderate	18 (15.00)	30 (18.75)	28 (22.95)	76 (18.91)	28 (14.14)
	Moderately Severe	8 (6.67)	36 (22.50)	4 (3.28)	48 (11.94)	18 (9.09)
	Severe	6 (5.00)	6 (3.75)	4 (3.28)	16 (3.98)	7 (3.54)
Job dissatisfaction	Satisfied	72 (60.00)	40 (25.00)	62 (50.82)	174 (43.28)	78 (39.39)
	Neutral	22 (18.33)	62 (38.75)	54 (44.26)	138 (34.33)	93 (46.97)
	Dissatisfied	26 (21.67)	58 (36.25)	6 (4.92)	90 (22.39)	27 (13.64)

HP = Healthcare Professionals

Table 3: Comparative scenario of anxiety, depression and dissatisfaction in job between healthcare and non-healthcare professionals

Variables		HP (N = 402)	Non-HP (N = 198)	OR (95% CI)	p-value
Variables	Severity/Score	N (%)	N (%)		
Based on severity		Cases (%)	Controls (%)		
Anxiety	Normal	124	86	1	ref.
	Mild	164	67	1.70 (1.14-2.52)	0.009
	Moderate	56	25	1.55 (0.9-2.68)	0.114
	Severe	58	20	2.01 (1.13-3.58)	0.002
Depression	Normal	100	88	1	ref.
	Mild	162	57	2.5 (1.65-3.80)	<.001
	Moderate	76	28	2.39 (1.42-4.02)	0.001
	Moderately Severe	48	18	2.35 (1.27-4.33)	0.006
	Severe	16	7	2.01 (0.79-5.11)	0.142
Job dissatisfaction	Satisfied	174	78	1	ref.
	Neutral	138	93	0.67 (0.46-0.97)	0.033
	Dissatisfied	90	27	1.49 (0.9-2.48)	0.120
Based on score					
Anxiety	Score ≤ 9	288	153	1	ref.
	Score > 9	114	45	1.35 (0.91-2.00)	0.142
Depression	Score ≤ 9	262	145	1	ref.
	Score > 9	140	53	1.46 (1.00-2.12)	0.005
Job dissatisfaction	Score ≤ 5	189	73	1.52 (1.07-2.15)	0.02
	Score > 5	213	125	1	ref.

OR: Odds Ratio; CI: Confidence Interval; p value <0.05 at 95% CI was considered as significant; ref: reference

Table 4: Anxiety, depression and job dissatisfaction status of Pharmacist, Physicians and Nurses in Bangladesh

Variables	Score	Cases	Controls	OR (95% CI)	p-value
		Phar. (%)	Phys.+Nurs. (%)		
Anxiety	Score ≤ 9	90	198	1	ref.
	Score > 9	70	44	3.5 (2.23-5.50)	<.001
Depression	Score ≤ 9	88	174	1	ref.
	Score > 9	72	68	1.62 (1.08-2.42)	0.019
Job dissatisfaction	Score > 5	65	148	1	ref.
	Score ≤ 5	95	94	2.3 (1.53-3.46)	<.001
		Phys.	Phar.+Nurs.		

Variables	Score	Cases	Controls	OR (95% CI)	p-value
		Phar. (%)	Phys.+Nurs. (%)		
Anxiety	Score $\leq$ 9	102	186	1	ref.
	Score $>$ 9	18	96	0.34 (0.20-0.60)	<.001
Depression	Score $\leq$ 9	88	174	1	ref.
	Score $>$ 9	32	108	0.59 (0.37-0.94)	0.026
Job dissatisfaction	Score $>$ 5	69	144	1	ref.
	Score $\leq$ 5	51	138	0.77 (0.50-1.19)	0.237
		Nurs.	Phar.+Phys.		
Anxiety	Score $\leq$ 9	96	192	1	ref.
	Score $>$ 9	26	88	0.59 (0.36-0.98)	0.040
Depression	Score $\leq$ 9	86	174	1	ref.
	Score $>$ 9	36	104	0.70 (0.44-1.11)	0.128
Job dissatisfaction	Score $>$ 5	79	134	1	ref.
	Score $\leq$ 5	43	146	0.50 (0.32-0.78)	0.002

OR: Odds Ratio; CI: Confidence Interval; p value <0.05 at 95% CI was considered as significant.
 ref: reference, Phys.: Physicians; Phar: Pharmacists; Nurs.: Nurses

Table 5: Association of anxiety and depression with job dissatisfaction

Variables	Anxiety and Depression score	Job Dissatisfaction		OR	95% CI	p-value
		Score ≤ 5 (cases)	Score > 5 (controls)			
Pharmacist (N= 160)						
Anxiety	Score ≤ 9	46	44	1	-	-
	Score > 9	49	21	2.23	1.16 - 4.31	0.017
Depression	Score ≤ 9	45	43	1		-
	Score > 9	50	22	2.17	1.13 - 4.17	0.019
Physicians (N = 120)						
Anxiety	Score ≤ 9	43	59	1	-	-
	Score > 9	8	10	1.1	0.40 - 3.01	0.856
Depression	Score ≤ 9	36	52	1	-	-
	Score > 9	15	17	1.27	0.56 - 2.88	0.559
Nurses (N = 122)						
Anxiety	Score ≤ 9	26	70	1	-	-
	Score > 9	17	9	1.47	0.82 - 2.63	0.199
Depression	Score ≤ 9	30	56	1	-	-
	Score > 9	13	23	1.06	0.47 - 2.38	0.897

Table 6: Association of gender, age and job experience in anxiety, depression and job dissatisfaction of healthcare professionals

Variables/Score		Cases (%)	Controls (%)	OR (95% CI)	p-value
	Gender	Male (N=212)	Female (N=190)		
Anxiety	Score $\leq$ 9	162	126	1	ref.
	Score > 9	50	64	0.61 (0.40-0.94)	0.026
Depression	Score $\leq$ 9	88	174	1	ref.
	Score > 9	72	68	2.09 (1.38-3.18)	<.001
Job dissatisfaction	Score > 5	128	85	1	ref.
	Score $\leq$ 5	84	105	0.53 (0.36-0.80)	0.002
	Age	> 30 years (N=154)	< or = 30 years (N=248)		
Anxiety	Score $\leq$ 9	114	174	1	ref.
	Score > 9	40	74	0.83 (0.53-1.30)	0.404
Depression	Score $\leq$ 9	93	167	1	ref.
	Score > 9	61	81	1.35 (0.89-2.05)	0.157
Job dissatisfaction	Score > 5	83	130	1	ref.
	Score $\leq$ 5	71	118	0.94 (0.63-1.41)	0.773
	Job Experience	> 3 years (N=148)	1-3 years (N=254)		
Anxiety	Score $\leq$ 9	94	194	1	ref.
	Score > 9	54	60	1.86 (1.19-2.89)	0.006
Depression	Score $\leq$ 9	101	161	1	ref.
	Score > 9	47	93	0.81 (0.52-1.24)	0.325
Job dissatisfaction	Score > 5	78	135	1	ref.
	Score $\leq$ 5	70	119	1.02 (0.68-1.53)	0.931

OR: Odds Ratio; CI: Confidence Interval; p value <0.05 at 95% CI was considered as significant.

ref: reference, Phys.: Physicians; Phar: Pharmacists; Nur.: Nurses

DISCUSSION

The current study investigated the prevalence of anxiety, depression, and job dissatisfaction among Bangladeshi healthcare professionals, including nurses, physicians, and pharmacists. The current study investigated the prevalence of anxiety, depression, and job dissatisfaction among Bangladeshi healthcare professionals, including nurses, physicians, and pharmacists. We used age, gender, BMI, marital status, job types, job experience, and types of healthcare professionals to illustrate the participants' professional and demographic profiles. Around 56.23 % of participants were 30 years or less

than 30 years of old. There was nearly equal participation from men and women. When this study was being conducted, the majority of the healthcare professionals who were part of it had normal BMI ranges and was married. More than half of them had 3 years or less than 3 years of job experience.

We found the higher prevalence of anxiety (mild to severe) and depression (mild to severe) in healthcare professionals than that of non-healthcare workers. Overall, the prevalence of anxiety (mild to severe: 69.15%) and depression (mild to severe: 75.15%) was found to be higher among Bangladeshi healthcare workers than in many other countries, such as China, South Korea,

Italy, Brazil, Ethiopia, Singapore and India¹⁵⁻²⁰. Furthermore, the current study demonstrated around 86.25% and 82.5% of pharmacists in Bangladesh had mild to severe anxiety and depression, respectively that were higher than that of reported by French pharmacists (15.7%)²¹ and Qatar community pharmacists (44.8%)²². In terms of severity, pharmacists were more likely to experience mild anxiety ($p<0.001$), moderate anxiety ($p<0.001$), severe anxiety ($p<0.001$) and moderately severe depression ($p<0.001$) than the control respondents. We found that mild to severe anxiety and depression affected about 60% and 66.67%, respectively, of the Bangladeshi physicians. The percentage was greater than the percentage found by previous study in the Pakistani physicians²³. According to our findings, around 55.74% and 73.77% of nurses were found to have the anxiety (mild to severe) and depression (mild to severe), respectively. Almost similar findings (53.0% and 76.6%) were also observed in a study conducted in the Turkish nurses²⁴. Additionally, our study showed the higher prevalence of anxiety and depression in the Bangladeshi nurses than the prevalence determined by a previous study²⁵. The present study also found a lower risk of the development of anxiety and depression in nurses than the other healthcare professionals in Bangladesh.

Moreover, a higher percentage of healthcare professionals (22.39%) than non-healthcare professionals (13.64%) expressed job dissatisfaction. Around 60 % of physicians were satisfied in their job and 21.67 % were dissatisfied. Though, an opposite scenario of our findings was observed in a previous study conducted in Pakistan²⁶; however, another study conducted in Pune, India²⁷ reported similar findings, which align with our study. Furthermore, the Bangladeshi physician's job dissatisfaction rate was lower than the Bangladeshi pharmacists and nurses. Around 36.25% of pharmacists participated in our study were dissatisfied in their job. However, this finding was not consistent with study conducted on job satisfaction scale of pharmacist in Ethiopia²⁸. Moreover, risk of job dissatisfaction among pharmacists was also significantly higher than the physicians and nurses ($p<0.001$). Our research also confirmed the lower job dissatisfaction status of nurses in Bangladeshi than the rate of job dissatisfaction in Slovenian

and Saudi Arabian nurses^{29,30}.

The present study also demonstrated a significant association of anxiety and depression with job dissatisfaction in the Bangladeshi pharmacists. It also described the contribution of gender and job experience of healthcare professionals in anxiety and depression. However, the study had some limitations as we faced some complications during the survey. We collected data from small number of healthcare institutions due to the limited accessibility. Due to the limited free time of healthcare professionals particularly pharmacists and physicians, we used Google form to collect data that may impact on the accuracy and precision of data. Besides, it was very difficult to find out female participants due to females having less eagerness to participate.

CONCLUSION

Bangladeshi healthcare professionals had higher rates of anxiety, depression, and job dissatisfaction than non-healthcare workers. Particularly, pharmacist had the significantly higher level of anxiety, depression and job dissatisfaction compared with that of physicians and nurses. The association of anxiety and depression with job dissatisfaction was also found in pharmacists. On the contrary, nurses had the lower risk of all variables compared to that of physicians and pharmacists. Therefore, more studies with a large sample size and new groups of healthcare professionals are required to validate our study.

Conflict of interest: The authors declared no conflict of interest.

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Ethical declaration: The study was approved by the Ethical Review Committee of the Department of Pharmacy, State University of Bangladesh (2023-10-25/SUB/A-ERC/003).

Authors' contribution: SYT, MSH, AH and SY contributed to contract with participants to collect data and investigation. SYT and MSH design methodology and operate software. SYT, MSH, AH and SY contributed to write the original draft. AH, SY and MSH validate the study. SYT and MI contributed to the conceptualization and formal analysis. MI supervised the study, edited the manuscript and verified the data. All authors critically reviewed and approved the final manuscript.

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