

Factors Affecting Depression and its Effects on Health Among Nursing Students at the Teaching Hospital of Kampala International University

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ABSTRACT

The Beck Depression Inventory-II (BDI-II) was used to assess the prevalence and extent of depression among nursing students at Kampala International University. The study involved 443 students, using both quantitative and qualitative data. The results showed that mild mood disturbance was prevalent at 17.83%, borderline clinical depression at 8.35, moderate depression at 17.83%, severe depression at 7.00%, and extreme depression at 1.13%. The prevalence of depression was found to be 25.96%, seven times the World Health Organization's estimate. The study underscores the need to address the aggravating factors of depression among nursing students.

Keywords: Depression, health, related outcomes and students

INTRODUCTION

Major depressive disorder, commonly known as depression is a condition expressed by at least two weeks of low mood that exists across most situations often accompanied by loss of interest in normally enjoyable activities, low self-esteem, pain without clear cause, loss of energy [1, 2]. Depression as a whole significantly contributes to the global burden of disease and affects all communities across the world. There are more than 300 million people who are affected by depression across the globe [3, 4]. It varies from short-lived emotional responses to challenges in everyday life and usual mood fluctuations. Particularly when long-lasting and with moderate to severe intensity, it can be a serious health condition. It can bring great suffering to the affected person and cause tremendous decline in the individual's productivity at work, at school and within their own families and in a worst case scenario, it can lead to suicide; which is the second leading cause of death in individuals aged 15-29 years old and claiming over 800,000 lives of people every year [3, 5].

While there is a wide variation in the prevalence of depressive and/mood disorders across various parts of the world, a research conducted among

university students in Denizli, Turkey found a prevalence of 26.2% [6], while a systemic review and meta-analysis done in 2016 among medical students in USA showed that 27.2% had depression or symptoms of depression but with only 15.7% who had sought psychiatric treatment [7]. Similar studies done among secondary school students revealed highs of 42.9% in Saudi Arabia, Taif area [8] and 41.1% in Vietnam [9]. A research done about the lifetime prevalence of mental disorders in US adolescents reported that 14.3% had mood disorders [10]. Still in USA general population, a survey revealed that 45% of the adults population had severe typical depression while 35% of the adolescents were also suffering from the same [11].

Depressive disorders were reported in 2015 lead a global total of over 50 million Years Lived with Disability (YLD) with over 80% occurring in the low- and middle-income countries. In Africa, depressive disorders contributed 7.9% and it is estimated that by 2020 the burden will increase to 5.7% [12, 13, 14].

The Risk factors of depression are a wide interaction of social, psychological and biological factors [7]. People who have gone through devastating life events

Alice (bereavement, unemployment, psychological trauma) are the people with the highest risk of developing depression [15, 16]. Depression can, thus, lead to more depression and dysfunction and worsen the affected person's life even further once it has turned out to become debilitating. There are correlations between physical health and depression. For example, cardiovascular disease can lead to depression and vice versa [3]. In Africa, Uganda is ranked among the top six countries with the highest cases of

mental disorder. According to the latest World Health Organization (WHO) report, 1.7 million (4.6%) Ugandans suffer from depressive disorders [3]. Available statistics shows the is scarce data regarding the situation of mental health among medical students in tertiary institutions in Uganda This study therefore sought to assess the factors influencing depression and its health-related outcomes among nursing study of Kampala International University.

METHODOLOGY

Study Design

The study design was descriptive cross-sectional using a quantitative and qualitative data collection method [17].

Study Setting

The study was conducted at Kampala international university, Western Campus among Nursing students.

Study Population

This included nursing students from the school of Nursing of KIU-Western Campus respectively.

Inclusion criteria

Nursing students of KIU-WC at Certificate, Diploma and Bachelors levels respectively

who consented to participate in the study were enrolled

Exclusion criteria

Nursing students at Certificate, Diploma and Bachelors levels respectively who did not consent were excluded from participating.

Sample size determination

The sample size was determined using the Kregeie and Morgan(1970). A sample size of 443 participants was used in this study as shown in the table below in appendix VIII.

Table 1: Population at KIU-Western Campus Nursing School as per August to December 2019.

Level	Population	Sample size
Certificate	2021	322
Diploma	93	73
Bachelors	55	48
Total	2169	443

Thus the sample size is 443.

Sampling Technique

The students were sampled randomly from the different nursing classes until the sample size is achieved.

Data analysis

Data was organized, coded and entered into SPSS V 20 for Analysis, processed data was presented in percentage frequency distribution tables, pie charts, bar graphs and time graphs, P-values was used to

establish the Factors affecting depression as well as the health-related outcomes.

Ethical consideration

A letter of authorization was collected from the Dean Faculty Clinical Medicine & Dentistry to introduce the researcher to the school of nursing where data was collected. Written consent was from each participant. Confidentiality was ensured by not attaching participant's names to responses [18].

RESULTS

Prevalence of depression among nursing students was at 25.96%, of which 17.83% had moderate,

7.00% had severe, and 1.13% had extreme depression. Only 47.86% were normal, 17.83% had mild mood disturbance, while 8.35% had borderline clinical depression.

Table 2: Individual Factors Influencing Depression Among the Nursing Students at KIU-WC

		Frequency	Percent	Cumulative Percent
Gender	Male	221	49.9	49.9
	Female	222	50.1	100.0
Age group	14-18	19	4.3	4.3
	19-23	253	57.1	61.4
	24-28	142	32.1	93.5
	29-33	20	4.5	98.0
	>=34	9	2.0	100.0
Cadre	BNS	55	12.4	12.4
	DNS	23	5.2	17.6
	CNS	307	69.3	86.9
	BNS/E	20	4.5	91.4
	DNS/E	38	8.6	100.0
Marital Status	Single	269	60.7	60.7
	Married	50	11.3	72.0
	Widow / Widower	3	0.7	72.7
	Divorced	2	0.5	73.1
	Cohabiting	15	3.4	76.5
	In relationship	104	23.5	100.0
How many years have you been married/in relationship?	< 1 yr.	307	69.3	69.3
	1 - 2 yrs.	72	16.3	85.6
	3 - 4 yrs.	29	6.5	92.1
	5	2	0.5	99.5
	5 yrs. and above	33	7.4	100.0
Apart from school (studies), do you have any other occupation?	Yes	174	39.3	39.3
	No	269	60.7	100.0
Are you a private student or you are sponsored?	Yes	286	64.6	64.6
	No	157	35.4	100.0
	Yes	225	50.8	50.8

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Being married makes me depressed	No	218	49.2	100.0
Being in a new relationship gives me stress	Yes	219	49.4	49.4
	No	224	50.6	100.0
Being single makes me depressed	Yes	224	50.6	50.6
	No	219	49.4	100.0
Being a private student gives stress	Yes	347	78.3	78.3
	No	96	21.7	100.0
Being loan sponsored causes stress	Yes	310	70.0	70.0
	No	133	30.0	100.0
Managing job and study demands concurrently causes depression	Yes	318	71.8	71.8
	No	125	28.2	100.0
Poor results get me depressed?	Yes	411	92.8	92.8
	No	32	7.2	100.0
Financial constraints cause me stress	Yes	417	94.1	94.1
	No	26	5.9	100.0
Lack of scholastic materials depresses me	Yes	351	79.2	79.2
	No	92	20.8	100.0
Do you get worried or bothered with the high expectations from your parents?	Yes	240	54.2	54.2
	No	203	45.8	100.0
Total		443	100.0	

Out of 443 respondents, 221(49.9%) were male, while the remainder, 222(50.1%), were female. About age group 443(100.0%), 14 to 18 years were 19(4.3%), 19 to 23 years were 253(57.1%), 24 to 28 years were 142(32.1%), 29 to 33 years were 20(4.5%), while those above 33 years were 9(2.0%). Talking about the cadre, out of 443(100.0%), BNS was 55(12.4%), DNS was 23(5.2%), CNS was 307(69.3%), BNS/E was 20(4.5%), while DNS/E were 38(8.6%). Considering those marital/ relationship statuses; single students were 269(60.7%), married ones were 50(11.3%), 3(0.7%) widowed, 2(0.5%) divorced, 15(3.4%) were cohabiting, while those in relationship were 104(23.5%). Regarding duration in marriage/ relationship, those; with less than one year were 307(69.3%), between one and two years, were 72(16.3%), those between three and four years 29(6.5%), those with five years were only two (0.5%), while those with more than five years were

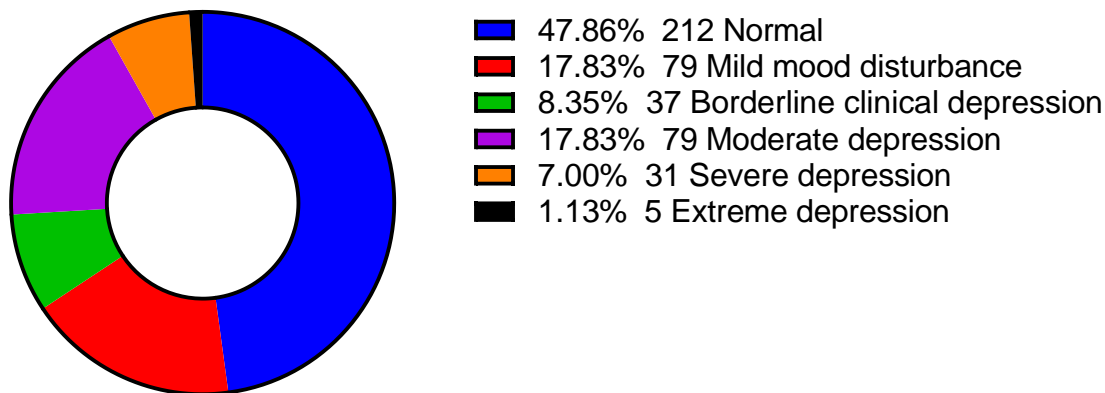
33(7.4%) in number. 174(39.3%) had other occupations besides being students, while 269(60.7%) did not. There were 286(64.6%) private students, while 157(35.4%) were sponsored. 219(49.4%) reported being depressed by marriage, while 224(50.6%) were not depressed by marriage. 347(78.3%) students said being single makes them depressed, while 96(21.7%) said they are not depressed about being single. 347(78.3%) said being a private student stresses them, while 96(21.7%) were not stressed about being a private student. 310(70.0%) students reported being stressed due to being loan sponsored, while 133(30.0%) said that loans did not stress them. 318(71.8%) students reported that managing a job and study demands concurrently cause stress, while 125(28.2%) were not stressed by work and study demands concurrently. Regarding academics, out of 433(100.0%) students, 411(92.8%) reported poor results

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depresses them while 32(7.2%) students were not. 417(94.1%) reported financial constraints get them depressed, while 26(5.9%) were not. 351(79.2%) students reported that lack of educational materials

depresses them, while 92(20.8%) were not. 240(54.2%) students were worried or bothered by the high expectations, while 203(45.8%) were not.

Table 3: Institutional Factors Influencing Depression Among the Nursing Students at KIU-WC

		Frequency	Percent	Cumulative Percent
The examination's timing depresses me	Yes	357	80.6	80.6
	No	86	19.4	100.0
The gap between theory and practical studies depresses me	Yes	196	44.2	44.2
	No	247	55.8	100.0
The nature of the curriculum depresses me	Yes	218	49.2	49.2
	No	225	50.8	100.0
The academic burden is too much for me to handle	Yes	175	39.5	39.5
	No	268	60.5	100.0
The harassments from my teachers and administrators depresses me	Yes	259	58.5	58.5
	No	184	41.5	100.0
Total		443	100.0	



Total=443

Figure 1: Level of Depression among Nursing Students

While considering institutional factors influencing depression among nursing students of KIU-TH. Out of 443(100.0%), 357(80.6%) students reported that examinations timing depresses them, while 86(19.4%) were not mentally disturbed by examination timing.

196(44.2%) students said that the gap between theory and practical studies depresses them, while 247(55.8%) were not depressed by the gap between theory and practical studies. 218(49.2%) reported being depressed by the

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nature of the curriculum, while 225(50.8%) were not depressed by the nature of the curriculum. 175(39.5%) students were overwhelmed by the academic burden, while 268(60.5%) were not. On a sad note, majority of the students, 259(58.5%) reported being depressed due to harassment by teachers and

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administrators—one of the respondents asserts; the semester was shortened from six months to three months without reducing the tuition. The remaining students, 184(41.5%), were not depressed due to harassment from teachers and administrators.

Table 4: Beck's Depression Inventory (BDI) Score

	Frequency	Percent	Cumulative Percent
Beck's Depression Inventory (BDI) score	0	53	12
	1	18	4.1
	2	13	2.9
	3	15	3.4
	4	22	5
	5	17	3.8
	6	17	3.8
	7	17	3.8
	8	23	5.2
	9	16	3.6
	10	9	2
	11	26	5.9
	12	18	4.1
	13	11	2.5
	14	7	1.6
	16	9	2
	17	10	2.3
	18	10	2.3
	19	5	1.1
	20	12	2.7
	21	10	2.3
	22	14	3.2
	23	3	0.7
	24	8	1.8
	25	8	1.8
	26	8	1.8
	27	5	1.1
	28	8	1.8
	29	4	0.9
	30	11	2.5
	31	3	0.7

32	4	0.9	93.5
33	5	1.1	94.6
34	4	0.9	95.5
35	5	1.1	96.6
36	3	0.7	97.3
37	3	0.7	98
38	1	0.2	98.2
39	1	0.2	98.4
40	2	0.5	98.9
41	3	0.7	99.5
43	1	0.2	99.8
48	1	0.2	100
Total	443	100	

The outcome of depressing factors among nursing students was measured using

Beck's Depression Inventory (BDI) score, as shown above.

Table 5: Levels of Depression

		Frequency	Percent	Cumulative Percent
Levels of Depression	Normal	212	47.9	47.9
	Mild mood disturbance	79	17.8	65.7
	Borderline clinical depression	37	8.4	74.0
	Moderate depression	79	17.8	91.9
	Severe depression	31	7.0	98.9
	Extreme depression	5	1.1	100.0
Total		443	100.0	

The summary and outcomes derived from table three above are illustrated in table four above, indicating the level of mental disturbance. The score results were classified as follows: Normal (1-10) --These are considered to be regular ups and downs of life, mild mood disturbance (11-16), borderline clinical depression (17-20), moderate depression (21-30), severe

depression (31-40), extreme depression (over 40).

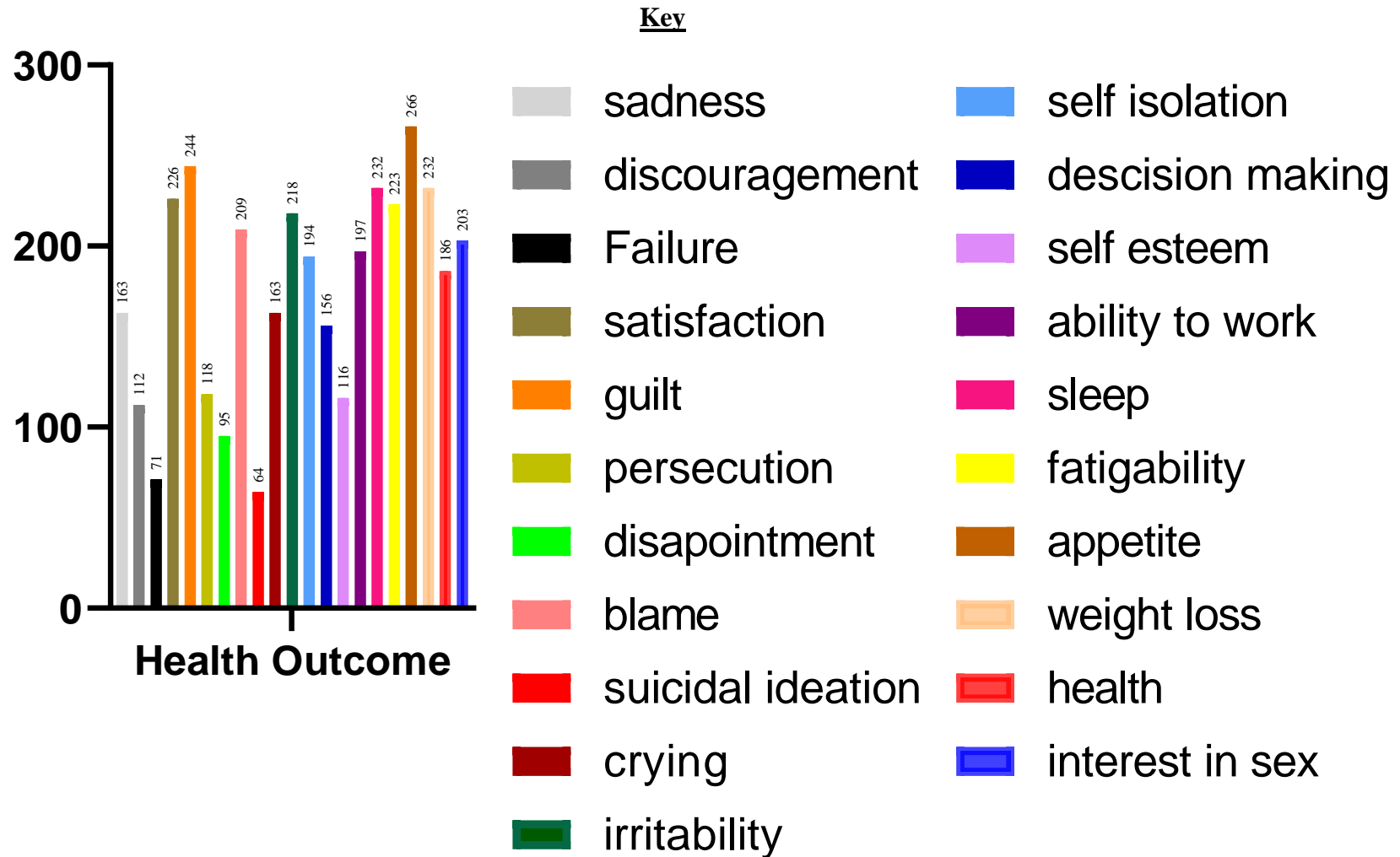
Out of 443(100.0%) students, 212(47.9%) less than a half of the respondents were normal, 79(17.8%) had mild mood disturbance, 37(8.4%) had borderline clinical depression, 79(17.8) had moderate depression, 31(7.0%) had severe depression; finally, 5(1.1%) had extreme depression.

Table 6: Depression Related Health Outcomes Among Nursing Students At KIU-WC

		Frequency	Percent	Cumulative Percent
Discouragement	I do not feel sad.	280	63.2	63.2
	I feel sad.	116	26.2	89.4
	I am sad all the time and I can't get out of it.	23	5.2	94.6
	I am so sad or unhappy that I can't stand it.	24	5.4	100.0
	I am not particularly discouraged about the future.	331	74.7	74.7
	I feel discouraged about the future.	66	14.9	89.6
	I feel I have nothing to look forward to.	39	8.8	98.4
	I feel that the future is hopeless and that things cannot improve.	7	1.6	100.0
	I do not feel like a failure.	372	84.0	84.0
Failure	I feel that I have failed more than the average (normal) person.	24	5.4	89.4
	As I look back on my life, all I can see is a lot of failures.	35	7.9	97.3
	I feel am a complete failure as a person.	12	2.7	100.0
	I get as much satisfaction as I used to from things I normally do.	217	49.0	49.0
Satisfaction	I don't enjoy things the way I used to. I don't get real satisfaction out of anything anymore.	158	35.7	84.7
	I don't get real satisfaction out of anything anymore.	67	15.1	99.8
	I am dissatisfied or bored with everything.	1	0.2	100.0
	I don't feel particularly guilty.	199	44.9	44.9
Guilt	I feel guilty sometimes.	162	36.6	81.5
	I feel quite guilty most of the time.	63	14.2	95.7
	I feel guilty all the time.	19	4.3	100.0
	I don't feel I am being punished.	325	73.4	73.4
	I feel I may be punished.	46	10.4	83.7
	I expect to be punished.	27	6.1	89.8
	I feel I am being punished.	45	10.2	100.0
	I don't feel disappointed in myself.	348	78.6	78.6
	I am disappointed in myself.	64	14.4	93.0
Disappointment	I am disgusted with myself.	17	3.8	96.8
	I hate myself.	14	3.2	100.0
	I don't feel I am any worse than anybody else.	234	52.8	52.8

Suicidal ideation	I am critical of myself for my weaknesses or mistakes.	101	22.8	75.6
	I blame myself all the time for my faults.	70	15.8	91.4
	I blame myself for everything bad that happens.	38	8.6	100.0
	I don't have any thoughts of killing myself.	379	85.6	85.6
	I have thoughts of killing myself, but I would not carry them out.	44	9.9	95.5
	I would like to kill myself.	9	2.0	97.5
	I would kill myself if I had the chance.	11	2.5	100.0
	I don't cry any more than usual.	280	63.2	63.2
Crying	I cry more now than I used to.	51	11.5	74.7
	I cry all the time now.	16	3.6	78.3
	I used to be able to cry, but now I can't cry even though I want to.	96	21.7	100.0
Irritability	I am no more irritated now than usual.	225	50.8	50.8
	I get annoyed or irritated more easily than I used to.	107	24.2	74.9
	I feel irritated all the time now.	36	8.1	83.1
	I don't get irritated at all by the things that used to irritate me.	75	16.9	100.0
Decision making	Have not lost interest in other people.	249	56.2	56.2
	I am less interested in other people than I used to be.	119	26.9	83.1
	I have lost most of my interest in other people.	51	11.5	94.6
	I have lost all of my interest in other people	24	5.4	100.0
	I make decisions just as well as I ever could.	287	64.8	64.8
	I put off making decisions more than I used to.	61	13.8	78.6
Self esteem	I have greater difficulty in making decisions than before.	80	18.1	96.6
	I can't make decisions at all anymore.	15	3.4	100.0
	I don't feel I look any worse than I used to.	327	73.8	73.8
	I am worried that I am looking unattractive.	70	15.8	89.6
	I feel that there are permanent changes in my appearance that make me look unattractive.	35	7.9	97.5
	I believe that I look ugly.	11	2.5	100.0

Figure 2: Health Outcomes of Depression



In this study, out of 433 nursing students, only 280(63.2%) students were happy, the rest were sad; 331(74.7%) were not discouraged; 372(84.0%) did not feel to be failures; 217(49.0%) felt contented; 199(44.9%) were not guilty; 325(73.4%) did not feel persecuted; 348(78.6%) did not feel disappointed in themselves; 234(52.8%) did not blame themselves; 379(85.6%) did not have suicidal ideations; 280(63.2%) did not cry more than they used to; 225(50.8%) were not

irritated than they used to be; 249(56.2%) had not lost interest in people; 287(64.8%) could make decisions well; 327(73.8%) had self-esteem; 246(55.5%) could work well as before; 211(47.6%) could sleep well; 220(49.7%) did not get tired than they used to; 177(40%) had no change in appetite; 211(47.6%) had not lost weight; 257(58.0%) were not worried about their health; and, 240(54.2%) had not noticed any change in their interest of doing it.

Table 7: Bivariate and Multivariate Table of Individual Factors Influencing Depression Against Depression Among the Nursing Students at KIU-WC

		Depressed		Total	OR	95%CI	P
		Yes	No				
Gender	Male	113(48.9)	108(50.9)	221(49.9)	0.920	0.62 to 1.36	0.704000
	Female	118(51.1)	104(49.1)	222(50.1)			
		Depressed		Total	OR	Chi-sq	P
		Yes	No				
Age group	14-18	10(4.3)	9(4.2)	19(4.3)	1.000	5.106	0.285100
	19-23	132(57.1)	121(57.1)	253(57.1)	0.982	0.001	1.000000
	24-28	79(34.2)	63(29.7)	142(32.1)	1.129	0.061	0.999000
	29-33	8(3.5)	12(5.7)	20(4.5)	0.600	0.627	0.893000
	>=34	2(0.9)	7(3.3)	9(2.0)	0.257	2.421	0.399000
Cadre	BNS	27(11.7)	28(13.2)	55(12.4)	1.000	7.906	0.095900
	DNS	12(5.2)	11(5.2)	23(5.2)	1.131	0.062	0.999000
	CNS	171(74.0)	136(64.2)	307(69.3)	1.304	0.819	0.838000
	BNS/E	8(3.5)	12(5.7)	20(4.5)	0.691	0.490	0.929000
	DNS/E	13(5.6)	25(11.8)	38(8.6)	0.539	2.050	0.483000
Marital Status	Single	129(55.8)	140(66.0)	269(60.7)	1.000	12.480	0.031300
	Married	24(10.4)	26(12.3)	50(11.3)	1.002	0.000	1.000000
	Widow / Widower	2(0.9)	1(0.5)	3(0.7)	2.171	0.422	0.973000
	Divorced	2(0.9)	0(0.0)	2(0.5)	infinity	2.924	0.367000
	Cohabiting	12(5.2)	3(1.4)	15(3.4)	4.341	6.218	0.062000
	In relationship	62(26.8)	42(19.8)	104(23.5)	1.602	4.103	0.196000
How many years have you been married/in a relationship?	< 1 yr.	156(67.5)	151(71.2)	307(69.3)	1.000	5.850	0.300600
	1 - 2 yrs.	43(18.6)	29(13.7)	72(16.3)	1.435	1.868	0.529000
	3 - 4 yrs.	13(5.6)	16(7.5)	29(6.5)	0.786	0.380	0.954000
	5 yrs. and above	19(8.2)	14(6.6)	33(7.4)	1.314	0.548	0.914000

		5	0(0.0)	2(0.9)	2(0.5)	0.000	2.825	0.323000
		Depressed		Total	OR	95%CI	P	
		Yes	No					
Apart from school (studies), do you have any other occupation?	Yes	69(29.9)	105(49.5)	174(39.3)	0.430	0.29 to 0.65	0.000027	
	No	162(70.1)	107(50.5)	269(60.7)				
Are you a private student, or are you sponsored?	Yes	155(67.1)	131(61.8)	286(64.6)	1.260	0.84 to 1.90	0.274000	
	No	76(32.9)	81(38.2)	157(35.4)				
Being married makes me depressed	Yes	115(49.8)	110(51.9)	225(50.8)	0.920	0.62 to 1.36	0.704000	
	No	116(50.2)	102(48.1)	218(49.2)				
Being in a new relationship gives me stress	Yes	112(48.5)	107(50.5)	219(49.4)	0.920	0.63 to 1.36	0.704000	
	No	119(51.5)	105(49.5)	224(50.6)				
Being single makes me depressed	Yes	117(50.6)	107(50.5)	224(50.6)	1.010	0.68 to 1.49	1.000000	
	No	114(49.4)	105(49.5)	219(49.4)				
Being a private student gives stress	Yes	183(79.2)	164(77.4)	347(78.3)	1.120	0.69 to 1.80	0.646000	
	No	48(20.8)	48(22.6)	96(21.7)				
Being Loan sponsored causes stress	Yes	159(68.8)	151(71.2)	310(70.0)	0.890	0.58 to 1.37	0.605000	
	No	72(31.2)	61(28.8)	133(30)				
Managing job and study demands concurrently causes depression	Yes	158(68.4)	160(75.5)	318(71.8)	0.700	0.45 to 1.09	0.113000	
	No	73(31.6)	52(24.5)	125(28.2)				
Poor results get me depressed?	Yes	209(90.5)	202(95.3)	411(92.8)	0.470	0.19 to 1.07	0.065000	
	No	22(9.5)	10(4.7)	32(7.2)				
Financial constraints cause me stress	Yes	215(93.1)	202(95.3)	417(94.1)	0.670	0.26 to 1.60	0.419000	
	No	16(6.9)	10(4.7)	26(5.9)				
Lack of scholastic materials	Yes	179(77.5)	172(81.1)	351(79.2)	0.800	0.49 to 1.30	0.351000	
	No	52(22.5)	40(18.9)	92(20.8)				

depresses me Do you get worried or bothered with the high expectations from your parents?	Yes	124(53.7)	116(54.7)	240(54.2)	0.960	0.65 to 1.42	0.849000
	No	107(46.3)	96(45.3)	203(45.8)			
Total		231(100.0)	212(100.0)	443(100.0)			

Table 8: Bivariate and Multivariate Table of Institutional Factors Influencing Depression and Its Health-Related Outcomes Among the Nursing Students at KIU-WC

		Depressed		Total	OR	95%CI	P
		Yes	No				
Examination's timing depresses me	Yes	192(83.1)	165(77.8)	357(80.6)	1.400	0.85 to 2.32	0.186000
	No	39(16.9)	47(22.2)	86(19.4)			
The gap between theory and practical studies depresses me	Yes	97(42.0)	99(46.7)	196(44.2)	0.830	0.56 to 1.22	0.339
	No	134(58.0)	113(53.3)	247(55.8)			
The nature of the curriculum depresses me	Yes	117(50.6)	101(47.6)	218(49.2)	1.130	0.76 to 1.67	0.568000
	No	114(49.4)	111(52.4)	225(50.8)			
The academic burden is too much for me to handle	Yes	97(42.0)	78(36.8)	175(39.5)	1.240	0.83 to 1.86	0.285000
	No	134(58.0)	134(63.2)	268(60.5)			
The harassments from my teachers and administrators depresses me	Yes	147(63.6)	112(52.8)	259(58.5)	1.560	1.05 to 2.33	0.026000
	No	84(36.4)	100(47.2)	184(41.5)			
Total		231(100.0)	212(100.0)	443(100.0)			

DISCUSSION

The prevalence of depression among Kampala International University nursing students was 25.96%, seven times above the WHO estimate. According to [19], depression is estimated at 3.8% of the population affected. The world health organization estimates that about 300 million people are affected by depression, with an increase of more than 18% between 2005 and 2015 [3]. More than 5% of the population suffers from depression in the Middle East, North Africa, sub-Saharan Africa, eastern Europe, and the Caribbean [3] with Afghanistan being reported to be

the most depressed country, where more than 1 in 5 people suffer from the disorder with the least depressed being Japan, with a diagnosed rate of less than 2.5% [3]. In a similar study conducted in the United States, New Zealand and Britain, depression had a prevalence of 0.4 to 16.8% [20]. In a cross-sectional study among medical students across 47 countries, the prevalence of depression or depressive symptoms was found to be 27.2% with suicidal ideation rating at 11.1% [7]. The general estimates of the prevalence of depression among students vary across

studies from 1.4% to 73.5 %, [21] and those of suicidal ideation vary from 4.9% to 35.6 % [22]. In Uganda, a study conducted among students at Makerere University found the prevalence of depression was 16.2 % [23].

The observed prevalence of depression in among nursing students in the present studies may be linked with some individual and institution related factors we will be discussing the subsequent discussion section.

Individual factors influencing depression and its health-related outcomes among the Nursing students of KIU-TH played a role in mood disturbance. Cadre, especially BNS 27(11.7%) students were depressed (OR=1, P=0.0959); this could be because of too many expectations by the university from the students and the workload. Marital status, primarily single (OR=1, P=0.0313) and cohabiting (OR=4.341, P=0.062) students were more likely to be depressed; this could be due to wanting to belong and be loved, considering single students. In contrast, the cohabiting student could be due to a lack of balance between schoolwork and a love life. There was solid evidence that students who had other occupations apart from being students were depressed (OR=0.026, 95%CI (0.29 to 0.65), P=0.000027); this is because of increased work and school demands, which would lead to sleep deprivation and increased mood disturbance which turns into stress.

In addition, a study done among Ireland nursing students also documented financial constraints as a big depressor [24]. This agrees closely with findings from our study, it is possibly because generally in developing countries people live in a resource constrained environment where most are still below the poverty line. In this regard, Uganda is not spared. It is reported that over 34.6% of the people were still living on less than \$1.9 by 2012 [25].

In the light of this, families where most students come from cannot provide for their financial requirements in terms of scholastic materials and basic needs, let alone money for their personal needs.

A study done in Uganda at Makerere University revealed that high parental

expectations are a cause of depression which accounts for 26.7% depression among nurses [26]. Naturally, children do not want to disappoint their parents, as a result these students are pushed to read so much to please their parents. It is therefore not surprising that high parental expectations constitute a major students depressor [27]. The year of study have been reported by previous studies a factor associated with depression among students. In a study among nursing students at Najran University in Saudi Arabia, it was observed that total depression score varies throughout the years with senior students having less depression level than junior students [28]. Accordingly, nursing education depression total and subscale scores of 4th year nursing students were observed to be higher [29]. These results are in consistent with other studies that emphasize the fact that as students obtain more experience through their studies, they likely perceive less depression [30]. A cross-sectional among 385 medical students at Jizan University in Kingdom of Saudi Arabia and the prevalence of depression among medical students was 71.9%, with females being more depressed (77%) than the males (64%); [31]. Further, Female students' total depression and subscale scores of nursing education were higher and there was a significant relation between them and girls who are more emotional, such as patient care more sensitive to the issues may have increased the level of depression [32].

Baldwin, Wilkinson and Bradley [33] emphasized that student-workers experience greater depression during mid-term and final examination periods of the academic year than during any other time. This arises from absenteeism from class due to the demand to be at work. Also findings from another study by [34] showed that daily academic depression was found to be the most depressive (M = 3.11; SD = 0.96) while personal problems were reported as the least depressive (M = 2.27; SD = 0.86). Age (OR = .88) was a significant predictor of having supplementary exams.

In comparison with peers of similar age-groups, medical students are found to consistently experience higher overall

levels of psychological distress [35] and these results indicate the consequences of ignoring depression among students in medical schools severely affect personal health, professional growth and personal development. In Italy a study found out that depression was associated with poor performance in class [6] another reason why depression should be considered carefully among medical students.

Depression is often co-morbid with other chronic diseases or a result of these illnesses and can worsen their associated health outcomes [36]; however fewer studies have explored the effects of

depression alone on overall impact on the health status of the patient. In comparison with peers of similar age-groups, medical students are found to consistently experience higher overall levels of psychological distress [35] and these results indicate the consequences of ignoring depression among students in medical schools severely affect personal health, professional growth and personal development. In Italy a study found out that depression was associated with poor performance in class [6] another reason why depression should be considered carefully among medical students.

CONCLUSION

The prevalence of depression among Kampala International University nursing students was 25.96%, seven times above the WHO estimate. Individual factors influenced depression and its health-related outcomes among the Nursing students of KIU-TH. Primarily single and cohabiting students were more likely to be depressed. Institutional related factors such as academic burden, the nature of the

curriculum, the gap between theory and practical studies, and examination timing also influenced depression and its health-related outcomes among the nursing students of KIU-TH. Therefore, there is an urgent need to address the etiology of depression among nursing students of Kampala International University.

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