Jurnal Berita Ilmu Keperawatan

Stress-Associated Factors Among Nursing Students In Higher Education In East Malaysia

Caroline Satu[1], Baidi Baddiri[1] Rohani Mamat[1], Mazlinda Musa[1], Clarice Duasin[1], Chung Su Chin[1], Muhammad Idris Bullare[2], Siti Fatimah Saat[3]

[1] *Department of Nursing, FPSK, Universiti Malaysia Sabah, Malaysia*

[2] *Psychology & Social Health Research Unit, Universiti Malaysia Sabah, Malaysia*

[3] *Kulliyyah of Nursing, International Islamic University Malaysia, Malaysia*

Corresponding email: baidibaddiri@ums.edu.my

Abstract: Introduction: Psychological distress among students leads to less productivity, reduced quality of life, and learning difficulties and may negatively affect patient care. Objective: The main aim of this study is to identify stress factors among UMS students.Methodology: A cross-sectional descriptive, universal sampling of 152 student nurses was included in this study. Respondents were given a self-answered structured questionnaire conclusive of socio-demographic data, the Perceived Stress Scale (PSS-10), and factors associated with stress. A descriptive analysis was used to analyze the data. Results & Findings: Out of 152 students, the majority have moderate stress (83.6 %), about 12.5 % have low-stress levels, and only 3.9 % of respondents have high stress levels. The results show that students experienced or reported significantly higher academic factors (24.9 %), followed by interpersonal factors (24.6 %) Conclusion: According to study findings, stress is most prevalent among nursing students and is attributed to academic and interpersonal causes. It is advised to use proactive learning strategies, peer and staff mentoring and modeling, professional networks and social support, psychological support, and faculty role and behavior.

Keywords: Stress, academic factors, Interpersonal factors

INTRODUCTION

The lifetime prevalence of depression, anxiety, and stress among adolescents and young adults is estimated to be anywhere between 5% and 70% worldwide. Women are twice as likely as men to suffer from depression, according to various studies. Depression, anxiety, and stress are all thought to be higher in nursing students, and these rates are expected to remain high once these students graduate and become nurses (Basu et al., 2016). Meng et al. (2015) state that nursing has been stressful as a caring profession.

Although the presence of increased psychological distress among nursing students has been recognized, there is still a significant lack of research that elucidates the intricate elements that contribute to these elevated levels of mental health difficulties. With its unique stressors, the transition from student to professional life is an understudied topic in the current body of literature. Additionally, conducting a more comprehensive examination of the contextual stressors unique to the compassionate nursing field, as Meng et al. (2015) emphasized, is crucial to developing more effective support systems and interventions.

Stress has been linked to severe alcoholism, smoking, drug addiction, and suicide. Students' stress can be seen academically in their inability to complete assignments on time, their failure to submit assignments on time, their inability to solve problems, and their grades deteriorating (Labrague, 2013; Lim, Tam, & Lee, 2013; Mohamed & Abdul El-Hafez, 2015). According to Sharma and Kaur (2011), excessive stress causes physical and mental health problems and lowers self-esteem. According to other

research, stress has also been linked to interpersonal conflict, sleep disturbances, and low academic and clinical performance. Lim and Zeppa (1984); Niemi and Vainiomaki (2006).

The advent of the COVID-19 pandemic and the change to an online learning platform during the spring semester of 2020 brought new stressors to this group of novice nursing students. The fear of contracting COVID-19 or having a loved one contract COVID-19 was a new concern. The transition to virtual clinical was linked to academic stress and feelings of isolation by many students Fitzgerald, A., & Konrad, S. (2021).

Through the investigation of these areas where research is lacking, this study seeks to provide significant contributions to understanding the complex and diverse mental health issues that nursing students encounter, specifically as they transition into the professional realm. Comprehending this is of the utmost importance to advance the creation of interventions grounded in empirical evidence that can efficiently alleviate psychological distress and improve the holistic welfare of nursing practitioners.

On the report of Mofida Younis, Mona Talat, an associate professor of nursing, academic factors (study load, including midterms and final exams, research assignments), intrapersonal factors (physical health, financial and mental health issues such as anxiety and depression, low diet), and interpersonal factors (relationship with a peer, a problem with friends, and romantic partner) are all sources of stress for nursing students. (in college, physical surroundings include new and unfamiliar situations, pollution, noise, and unsafe neighborhoods). In the opinion of Sharma & Kaur (2011), factors that contribute to stress in nursing students concluded the same domains in addition to the above groups of stress factors. Pulido, Augusto, and Lopez (2012) claim that academics are the most common source of stress. As stated by Aedh, Elfaki, and Mohamed (2015), academic factors are also a source of stress for nursing students. Interpersonal stress is the most commonly reported stressor, according to Al-Zayyat & Al-Gamal (2004).

Clinical and academic posting hours have been observed to be stressful for diploma nursing students, with academic posting hours causing the most stress. Nursing students have been privileged to work with various issues that limit their abilities. Fear of failure, uncertainty about the future, anxiety, sadness, lack of confidence, depression, lethargy, poor sleep patterns, low-performance satisfaction, and financial problems are familiar sources of stress. This study's primary goal is to identify the significant sources of stress among nursing students (academic, intrapersonal, interpersonal, and environmental factors) to improve their performance. Students will benefit from this research in identifying their stress factors; by understanding the elements, they will be able to effectively build coping mechanisms in the face of stressors. It will also enable students to grasp the lecturer's and clinical instructor's attention to their significant stressors. It's an opportunity for the lecturer and clinical instructor to learn about the student's problem, develop a solution for better adaptation, and assist the future learner fairly and straightforwardly in making the most of his or her time. This study will benefit the organization by teaching it about students' stressors and how to address them. Exploring stress factors' evolution in this study is hoped to reduce stress among nursing students at the University Malaysia Sabah.

As claimed by a study conducted by Mofida Younis, Mona Talat, and Elham (2011), academic stress was the most prevalent source of stress among King Saud University College of Nursing students, followed by intrapersonal, environmental, and interpersonal stress. Increased workload (64.9%), the anticipation of graduation (54.7%), lower grade than expected (48.5%), and change of major (career) (40.2%) were the most common academic sources of stress, according to the study.

According to a study by Afzal, Waqas, Hussain, and Schar (2016), nursing students experience stress from four sources: academics, clinical rotations, personal problems, and the environment. Nursing students reacted strongly to the study's strongly disagreed academic references. Academic sources are a stressor for nursing students at private universities, with 61.5% citing frequent graded activities as a source of stress, 49.5% citing lack of expected career advancement, 48.4% citing challenging courses and missing too many classes, and 47.5% citing inability to balance study and work. Clinical sources were also mentioned as a stressor in this study, with the results showing that maintaining a balance between clinical work and studying increases stress 44.3%, humiliating behavior of physicians and being criticized in front of patients 34.4%, and new clinical situations, unfamiliar patient diagnosis and treatment 31.1%,

explaining why nursing students are prone to s. A study by Kausar, Ali, and Gul (2014) states that nursing students on clinical placement suffer from stress.

Interpersonal relationships are the third source of stress for nursing students. According to a study conducted by Mofida Younis, Mona Talat, and Elham (2011), fifth-grade students experienced the most stress (70.0%), while the first- and second-grade students experienced the least (10.0%). Students younger than 20 years old, on the other hand, had the lowest stress levels (9.5%). However, no statistically significant links existed between marital status, birth order, and interpersonal stressors. Mofida Younis, and Elham, (2011).

Interpersonal factors were the third most common stressor affecting student nurses (M = 12.32, SD = 3.64), according to Abasimi, Atindanbila, Mahamah, and Gai (2015). Besides, Seyedfatemi, Tafreshi, and Hagani (2007) conducted a descriptive cross-sectional study to identify sources of stress and coping strategies in nursing students at the Iran Faculty of Nursing and Midwifery. This study included all undergraduate nursing students enrolled in years 1-4 during the academic year 2004-2005, and the students completed 366 questionnaires in total. "Finding new friends" (76.2%) and "working with people they didn't know" (63.4%) were the most common interpersonal sources of stress, followed by "new responsibilities" (72.1%) and "starting college" (65.8%). "Increased class workload" (66.9%) was the most common academic source of stress, and "being placed in unfamiliar situations" (64.2%) and "waiting in long lines" (64.2%) were the most common environmental sources of stress (60.4%)—university nursing students in Bangkok, Thailand where both contribute the main factors for interpersonal.

The researcher would like to evaluate how these contributing factors affect nursing students' stress due to this gap. Hopefully, this study's findings will help nursing students identify sources of stress and develop coping strategies to reduce stress caused by academic, intrapersonal, interpersonal, and environmental factors.

METHOD

This study was conducted using a quantitative survey in cross-sectional descriptive and using a questionnaire become the instrument. It was shown to all student nurses at the Faculty of Medicine and Health Sciences, University Malaysia Sabah. All 152 nursing students were selected from all batches. The study population comprises 130 females and 22 males, already married five, and the rest 147 are single between ages 18 and 27. The total number of nursing students is 152, including juniors and seniors, year one (57), year two (47), and year three (48). For the sampling method, this study used the universal sampling technique. The researcher included all subjects who met the inclusion criteria and completed and returned the questionnaires within the time frame allotted for this study.

A structured questionnaire was given to nursing students, and it was adopted and modified by the researcher based on the literature review to collect the information needed for the present study. The self-report questionnaire consisted of three parts: Part A: Part A was on the Socio-demographic data, including Age, gender, ethnicity, marital status, and total family household income. Part B: Perceived Stress Scale (PSS-10) was used to assess the level of stress among nursing students (Cohen, Kamarck, & Mermelstein, 1983). The adopted Perceived Stress Scale (PSS-10) is a classic stress assessment instrument developed in 1983 by Cohen, Kamarck, & Mermelstein. The Perceived Scale is a validated and reliable instrument to measure global levels of perceived stress. Cronbach's alpha for the total scale was 0.818. It has remained a popular choice in measuring individual stress levels. The instrument has ten items, all rated on a 4 4-point scale varying: Questions 4, 5, 7, and 8. On these 4 questions, change the scores like this: 0 = 4, 1 = 3, 2 = 2, 3 = 1, 4 = 0; scores ranging from 0-13 would be considered low stress. Scores ranging from 14-26 would be considered moderate stress, and scores ranging from 27-40 would be considered high perceived stress. Part C: Factors associated with stress among nursing students. This instrument consists of 40 items. The 40 items were divided into four main categories of potential sources of stress. Fourteen items represent academic factors, eleven represent intrapersonal factors, five represent interpersonal factors, and ten represent environmental factors. These 40 items of

the instrument in which all items are rated on 3 3-point scale varying from 0=never/rare, 1=sometimes, and 2=often/very often (Cohen & Williamson, 1988).

The study was conducted after written approval of the Ethical Medical Research Committee, Universiti Malaysia Sabah (permission ID: JKEtika 1/19-23). The data have been collected through the self-administrative questionnaire as a means of data collection. The data were collected in September 2020. The questionnaire was distributed after all the students were willing to answer the questionnaire and participate in the study; all respondents cooperated with the researcher. During these sessions, the study's purpose and rationale were explained. It takes about 20 to 25 minutes to complete the questionnaire. Once they had completed the questionnaires, the respondents returned their signed consent forms and completed questionnaires. The data were grouped based on the responses and each respondent's year of study.

The findings of the questionnaire given to nursing students will be the focus of this data analysis and result section. The findings will answer the researcher's question about the prevalence of stress among nursing students and the factors that contribute to it. First, in each of the three parts of the questionnaire, this section will describe each descriptive variable, namely demographic data, the Perceived Stress Scale (PSS), and associated stress factors students report, such as academics, intrapersonal, interpersonal, and environmental factors. The statistical analysis was performed with Statistical Package for Social Sciences (SPSS), version 25.

RESULT

Table 1 describes the demographic characteristics of the participants. Data are obtained and analyzed based on the information filled in by the participants in section A. This section captured participants' demographic data such as age, gender, year, ethnicity, status, and family income.

Table 1 depicts the age distribution of respondents. In this study, the respondents' ages ranged from 18 to 27. 152 in total. The subjects' ages ranged from 21 to 25 years n = 77, 50.7%) with the highest percentage. The second age group (n = 73, 48.0%) was 18 to 20. The third group (n = 2, 1.3%) was those aged 26 and up. The frequency and percentage of male and female nursing students are represented in this graph. There were 22 (14.5%) males among the 152 participants, with the remaining 130 being females (85.5%). The findings are discussed after all respondents have completed the distributed questionnaire. All of the respondents were Diploma in General Nursing students, with the first year having the highest number of participants (n = 57, 37.5%), followed by the final year (n = 48, 31.6%), and the second year (n = 47, 30.9%). The majority of the participants (n=85, 55.9%) were Kadazan/Dusun, as shown in the distributions of ethnicity of respondents. Other (n=34, 22.4%) comes in second, followed by Bajau (n=14, 9.2%). Malay (n=11, 7.2%), Brunei (n=5, 3.3%), and Chinese (n=3, 2.0%) participants round out the top four. Depicts the status distributions among nursing students. Most respondents are young, which explains why most (n =147, 96.7%) of the respondents are single, with only about (n=5, 3.3%) married. Table 1 shows the household family income distributions among the respondents. The household family income of most respondents (n=48, 31.6%) ranges from RM1000 to RM2500. A quarter of the respondents (n=37, 24.3%) have a monthly household income of less than RM1000. Another 23.7% of respondents (n=36) have a household income of RM2501-RM3500, followed by RM 3501-RM4500 (n=17, 11.2%) and household family income of more than RM4500 (n=14, 9.2%) per month.

Table 1 Demographic information of the respondents (n=152)

Demographic		Frequency	Percentage
Age	18 - 20	73	48.0
	21 - 25	77	50.7
	> 26	2	1.3
Gender	Female	130	85.5
	Male	22	14.5
Year	Year 1	57	37.5
	Year 2	47	30.9
	Year 3	48	31.6
Ethnicity	Malay	11	7.2
	Chinese	3	2.0
	Kadazan/Dusun	85	55.9
	Bajau	14	9.2
	Brunei	5	3.3
	Other	34	22.4
Status	Single	147	96.7
	Married	5	3.3
Family Income	<RM1000	37	24.3
	RM1000-RM2500	48	31.6
	RM2501-RM3500	36	23.7
	RM3501-RM4500	17	11.2
	>RM4500	14	9.2
	Total	152	100

Table 2 Descriptive analysis of Perceived Stress Scale (PSS-10)

	N	Range	Minimum	Maximum	Mean	Std. Deviation
TOTAL PSS	152	26.00	6.00	32.00	19.2303	4.60128

Table 2 shows the descriptive statistical analysis of the perceived stress scale (PSS-10). The range score was 26, the minimum score was 6, and the maximum score was 32, with a mean of 19.23 (SD = + 4.601)

Table 3, The prevalence of stress among nursing students

	Frequency	Percentage %
Low	19	12.5
Moderate	127	83.6
High	6	3.9
Total	152	100.0

Table 3 describes the prevalence of stress among nursing students according to Perceived stress scale scoring. According to PSS scoring, scores ranging from 0 - 13 would be considered low stress, scores ranging from 14 - 26 would be considered moderate stress, and scores ranging from 27 - 40 would be

considered high perceived stress. The result shows that about (n=127, 83.6 %) of respondents have moderate stress. Approximately (n=19, 12.5 %) of respondents have low stress levels, and only (n=6, 3.9 %) have high-stress levels. Thus, the perceived stress level among nursing students in this study is moderate stress.

Table 4, Stress-inducing Academic Factors by the studied subjects (n=152)

Academic factors	Never	Sometimes	Often
Inability to balance study and leisure time	17 (11.2 %)	74 (48.7 %)	61 (40.1 %)
Less vacation/breaks	26 (17.1 %)	77 (50.7 %)	49 (32.2 %)
Getting lower grade than anticipation	27 (17.8 %)	86 (56.6 %)	39 (25.7 %)
Over burden with study	20 (13.2 %)	100 (65.8 %)	32 (21.1 %)
Inability to concentrate on study	24 (15.8 %)	101 (66.4 %)	27 (17.8 %)
Practical work	37 (24.3 %)	91 (59.9 %)	24 (15.8 %)
Class Presentations	36 (23.7 %)	99 (65.1 %)	17 (11.2 %)
Poor satisfaction with class room performance	64 (42.1 %)	72 (47.4 %)	16 (10.5 %)
Inability to enjoy my study	38 (25.0 %)	101 (66.4 %)	13 (8.6 %)
Difficulty to understand language used by teacher while teaching	71 (46.7 %)	69 (45.4 %)	12 (7.9 %)
Poor interest in studies	94 (61.8 %)	52 (34.2 %)	6 (3.9 %)
Poor IPR with teachers	129 (84.9 %)	18 (11.8 %)	5 (3.3 %)
Serious Argument with teachers	136 (89.5 %)	16 (10.5 %)	0 (0 %)
Missing too many classes	144 (94.7 %)	8 (5.3 %)	0 (0 %)

Table 4 shows that the most common academic factor sources of stress were the inability to balance study and leisure time (n=61, 40.1%), followed by fewer vacation/breaks (n=49, 32.2%), receiving a lower grade than expected (n=39, 25.7%), and being overburdened with the study (n=32, 21.1%). On the other hand, severe disagreements with teachers and missing too many classes were the least reported factors. They were both (n=0, 0%), respectively.

Table 5, stress-inducing Interpersonal factors by the studied subjects (n=152)

Interpersonal factors	Never	Sometimes	Often
Lack of cooperation from friends	33 (21.7 %)	85 (55.9 %)	34 (22.4 %)
Lack of close and intimate friends	80 (52.6 %)	50 (32.9 %)	22 (14.5 %)
Change in social activities	59 (38.8 %)	73 (48.0 %)	20 (13.2 %)
Fight with close one's	53 (34.9 %)	81 (53.3 %)	18 (11.8 %)
Conflict with room mate	93 (61.2 %)	42 (27.6 %)	17 (11.2 %)

Table 5, interpersonal stressors; the results showed that lack of cooperation from friends (n=34, 22.4%), lack of close and intimate friends (n= 22, 14.5%), and change in social activities (n=20, 13.2%) were all sources of interpersonal stress for all of the students. Furthermore, students (n=18, 11.8%) fight with close friends and (n=81, 53.3%) occasionally experience interpersonal stress, whereas (n=17, 11.2%) conflict with a roommate was the factor with the highest percentage of "never" responses.

DISCUSSION

Academic Factor

In terms of academic variables, inability to manage research and leisure time (40.1%), fewer vacations/breaks (32.2%), receiving a lower grade than expected (25.7%), being overburdened with study (21.1%), inability to focus on the study (17.8%), and realistic work (15.8%) are all strongly linked to stress among students. According to studies conducted by other researchers, student stress has several causes. Nursing programs are divided into theoretical and practical elements, as described in the curriculum (clinical components). This necessitates different classes and clinical tasks, which could lead to overburdening of assignments and exam failure. As a result, students will have less time for extracurricular activities, breaks, and relaxation. At the same time, since students have poor time management and research strategies, it is unsurprising that many academic tasks in this study would cause stress. According to Evans and Kelly (2004), nursing students face the same stressors as other college students, including midterm and final exams, tasks, and study papers. According to Johnson (1995) and Forbes & Hickey (2009), as technology and patient health acuity increase, the nursing curriculum faces challenges in maintaining relevance and currency based on theoretical expertise and clinical judgment skills. Students are introduced to chronically ill patients and others who are acutely sick, and they must be competent in caring for all groups of patients. Curriculum reforms have resulted in more rigorous and demanding classes, which has added to the stress created by academic factors.

Interpersonal Factors

According to Table 5, the most common source of interpersonal stress is a lack of cooperation from friends (22.4%). Nursing as a discipline necessitates a rigorous curriculum to develop the necessary competencies for each student. All the students expressed dissatisfaction with their academic workload, and some even compared themselves to students in other disciplines. They also complain about having their exam, homework, classes, assignments, and practicals at the hospital while also having to complete a research paper assigned to them as a group project by their lecturers. They complain about not having enough time, that they are unable to cope at times, and that this causes stress, mainly when friends lack cooperation in a group project. In other cases, conflict may arise due

to cultural and racial differences among students; this differentiation may lead to misunderstanding among students.

Furthermore, problems associated with interpersonal factors, such as a lack of close and intimate friends (14.5%) and a change in social activities (13.2%), were identified, as were problems associated with stress related to interpersonal factors. This source of stress could be linked to a lack of social life due to living in an unfamiliar hostel and having a full schedule of activities, which prevents students from having a social life outside of their college and academic obligations. Meanwhile, according to a study by Seyedfatemi, Tafreshi, and Hagani (2007), the most common interpersonal sources of stress were making new friends (76.2%) and working with people they didn't know (63.4%), roommate conflict (52.2%), and a change in social activities (48.1%). In the current study, students at University Malaysia Sabah fight with close friends only 11.8% of the time, which is the second-lowest source of stress. Students experience interpersonal stress occasionally (53.3% of the time). Conflict with a roommate was the factor that received the most "never" responses from students. It demonstrated that student relationships are positive. In contrast, participants reported experiencing more stress from learning and life goals than interpersonal stress. In a study conducted by Mofida and Mona (2011), interpersonal factors perceived as sources of stress by students, the majority of the students reported that changes in social activities, working with people they did not know, fighting with family members, and meeting new people were all sources of interpersonal stress on a regular or occasional basis.

CONCLUSION

According to study findings, stress is most prevalent among nursing students and is attributed to academic and interpersonal causes. Work-related demands, limitations, and opportunities are threats beyond the individual's capacity and skill. People can express their creativity, abilities, and energies when they are under stress, but it can also lead to exhaustion and illness, both physical and mental. Stressors or events are situations or events that can impact one's health. Stress observation and reaction are critical during university life, where the relationship between students and the environment is unpredictable. Stress is more prevalent among nursing students. Academic, environmental, emotional, and personal issues can all cause stress in students. These stressors can affect students' learning ability and academic performance. As a result, it emphasizes the importance of concentrating on students' stressors. Identifying sources of stress among nursing students can lead to improvements in student performance and a shift in the teacher's attitude toward students, which can be hostile and dismissive at times. It is advised to use proactive learning strategies, peer and staff mentoring and modeling, professional networks and social support, psychological support, and faculty role and behavior

REFERENCE

Abasimi, E., Atindanbila, S., Mahamah, M. M., & Gai, X. (2015). The Experience of Stress among Nursing Students in Nursing Training Colleges in Tamale, Ghana. *International Journal of Psychology and Behavioral Sciences p-ISSN: 2163-1948 e-ISSN: 2163-1956*, 89-97. http://article.sapub.org/10.5923.j.ijpbs.20150502.06.html

Aedh, A. I., Elfaki, N. K., & Mohamed, I. A. (2015). Factors associated with stress among nursing students. *IOSR Journal of Nursing and Health Science (IOSR-JNHS)e-ISSN: 2320–1959.p- ISSN: 2320–1940 Volume 4, Issue 6 Ver. VI*, 33-38. https://www.iosrjournals.org/iosr-jnhs/papers/vol4-issue6/Version-6/E04663338.pdf

Afzal, M., Waqas, A., Hussain, M., & Schar, N. (2016). Sources of Stress among the Nursing Students of Private Universities of Pakistan. *South American Journal of Nursing*, vol (2): 1-9. https://doi.org/10.21522/TIJNR.2015.02.01.Art004

Al-Zayyat, A. S., & Al-Gamal, E. (2004). Perceived stress and coping strategies among Jordanian Nursing students during clinical practice in psychiatric/mental health courses. *International Journal of Mental Health Nursing 23*, 326-335. https://doi.org/10.1111/inm.12054

Basu, M., Sinha, D., Ahamed, A., Chatterjee, S., & Misra. (2016). Depression, Anxiety, Stress among nursing students of Kolkata: a cross sectional study. *Journal of Preventive Medicine and Holistic Health*, 2(2):54-60. https://www.jpmhh.org/article-details/3189

Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behaviour 24(4)*, 385-396. https://doi.org/10.2307/2136404

Edwards, D., Hawker, C., Carrier, J., & Rees, C. (2015). A systematic review of the effectiveness of strategies and interventions to improve the transition from student to newly qualified nurse. *International Journal of Nursing Studies*, 1254-1268. https://doi.org/10.1016/j.ijnurstu.2015.03.007

Evans, W., & Kelly, B. (2004). Pre-registration diploma student nurse stress and coping measures. *Nurse Education Today*, 24(6):473-82. https://doi.org/10.1016/j.nedt.2004.05.004

Fitzgerald, A., & Konrad, S. (2021). Transition in learning during COVID-19.Student nurse anxiety,stress, and resourse support. *Nursing Forum*, 56 (298-304. https://doi.org/10.1111/nuf.12547

Forbes, M. O., & Hickey, M. T. (2009). Curriculum reform in baccalaureate nursing education: review of literature. *International Journal of Nursing Education Scholarship*, 6(1), 1 – 16. https://doi.org/10.2202/1548-923x.1797

Gibbons, C., Dempster, M., & Moutray, M. (2008). Stress and eustress in nursing students. *Journal of Advanced Nursing*, 61 (3): 282-290. https://doi.org/10.1111/j.1365-2648.2007.04497.x

Hegge, M., & Larson, V. (2008). Stressor and coping strategies of students in accelerated baccalaureate nursing programs. *Nursing Educator*, 33(1), 26-30. https://doi.org/10.1097/01.NNE.0000299492.92624.95

Johnson, J. Y. (1995). Curricular trends in accredited generic baccalaureate nursing programs across the United States. *Journal of Nursing Education* 34(2), 53-60. https://doi.org/10.3928/0148-4834-19950201-04

Kausar, T., Ali, T. S., & Gul, R. (2014). Associated Factors of Stress among Nursing Students in their Clinical Settings. *The Malaysian Journal of Nursing*, vol 5 (2): 20-26. https://ecommons.aku.edu/pakistan_fhs_son/203/

Labrague, L. J. (2013). Stress, Stressors, and Stress Responses of Student Nurses in a Government Nursing School. *Health Science Journal issue* 4, 424-435.https://www.researchgate.net/publication/257299104_Stress_Stressors_and_Stress_Responses_of_Student_Nurses_in_a_Government_Nursing_School

Lim, B. S., & Zeppa, R. (1984). Stress in Junior Medical Students:Relationship to Personality and Performance. *Journal Med Educ*, 59(1): 7-12. https://doi.org/10.1097/00001888-198401000-00002

Lim, Y., Tam, C., & Lee, T. (2013). Perceived stress, Coping strategy and General health: A Study on Accounting Students in Malaysia. *Journal of Arts, Science & Commerce*, IV(1): 88-95. https://www.semanticscholar.org/paper/PERCEIVED-STRESS%2C-COPING-STRATEGY-AND-GENERAL-A-ON-Lim-Tam/1625a9589efb33cd05bea178639ad486a72bde4e

Meng, L., Ken, G., Wong, T. K., Min, Z. L., & Men, Y. C. (2015). Perceived stress among Macao nursing students in the clinical learning environment. *International Journal of Nursing Sciences 2*, 128-133. https://doi.org/10.1016/j.ijnss.2015.04.013

Mofida Younis, Mona Talat, & Elham, A. (2011). Sources of Stress as Perceived by Nursing Students at King Saud University. *Medical Journal of Cairo Univiversity*, 5vol 79 (1): 41-553. https://cu.edu.eg/data_journals/6/articles/891/submission/copyedit/891-1721-1-CE.pdf

Mohamed, N., & Abdul El-Hafez, N. (2015). Assessment of Critical care nursing students' stressors and coping Strategies During Clinical Practice in intensive care and emergency units. *Al-Azhar Assiut Medical Journal* , 13(4): 39-50

Niemi, P. M., & Vainiomaki, P. T. (2006). Distress-quality, Continuity and Gender Differences During a Six-year Medical Programme. *Med Teach*, 28(2): 136-141. https://doi.org/10.1080/01421590600607088

Pulido, M. M., Augusto, L. J., & Lopez, Z. E. (2012). Sources of stress in nursing students: a systemic review of quantitative studies. *International Nursing Review 59*, 15-25. https://doi.org/10.1111/j.1466-7657.2011.00939.x

Seyedfatemi, N., Tafreshi, M., & Hagani, H. (2007). Experienced stressors and coping strategies among Iranian nursing students. *BMC Nursing 6:11*, 1-10. https://doi.org/10.1186/1472-6955-6-11

Shaban, I. A., Khater, W. A., & Akhu-Zaheya, L. M. (2012). Undergraduate nursing students' stress sources and coping behaviours during their initial period of clinical training: a Jordanian perspective. *Nurse Educational Practice*, 204-9. https://doi.org/10.1016/j.nepr.2012.01.005

Sharma, N., & Kaur, A. (2011). Factors associated with stress Among Nursing students. *Nursing and Midwifery Research Journal*, 12-21. https://doi.org/10.1177/0974150X20110102