

Original article

Level of Depression and Suicidal Ideation among BSN Students

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Abstract: Undergraduate college students have been identified as at-risk population for development of suicidal ideation and depression. Student nurses are among those who experience depression and anxiety due to stressful life events. The stressful situations encountered by student nurses are multifaceted. Thus, this study explored the level of depression and suicidal ideation of BSN students and the effect of gender and year level. The need to explore these two salient factors was prompted by the need to promote and to improve school of nursing services, student safety, and decrease cases of depression and suicidal ideation among students. The study utilized a descriptive design. There were 326 student nurses who participated in the study. The questionnaire which was used for this study was based on 2 standardized self – report questionnaire. The findings showed that most of the students experienced mild to severe depression. Most of the students however, do not have suicidal ideation behavior, but almost one third of the students have a high risk for suicidal ideation behavior. Furthermore, the findings showed that gender and year level have no significant effect on the level of depression among BSN Students. Gender and year level have no significant effects in the level of suicidal ideation among student nurses. These findings can help guide the development of a school-based, prevention and promotion mental health program.

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INTRODUCTION

Depression is a common mental disorder that presents with down mood, loss of interest or pleasure, decreased energy, feelings of guilt or low self-worth, disturbed sleep or appetite, and poor concentration (WHO, 2012). If depression is unresolved, it can lead to suicide. As of today, many are suffering from depression. The latest global statistics is that more than 300 million people are battling depression, or an increase of more than 18 percent during the period 2005-2015 (Mateo, 2017). In the Philippines, 1 out of 20 Filipinos is depressed (DOH, 2018) and it is estimated that 3.29 million people are living with depression and that 3.07 million are living with anxiety (Mateo, 2017).

In 2009, the Centers for Disease Control predicted depression to be the second most prevalent disease burden in the world within the next six years. Despite the gravity of its consequences, resources provided by university systems to address the increasing prevalence of suicidal ideation and depression symptoms among undergraduate college student population are still limited (Potter, Silverman, Cannortor & Posner, 2004).

Zeroing on the problem, undergraduate college students have been identified as a unique at risk population for development of suicidal ideation and depression. Among college-age youth (20–24 years) in the United States, suicide is the third leading cause of death Centers for Disease Control

and Prevention (CDC, 2003). It is considered to be an important precursor to attempted and completed suicide (Gili-Planas, Roca-Bennasar, Ferrer-Perez & Bernardo_arroyo, 2001), associated with poor psychosocial functioning, school dropout (Daniel, Walsh, Goldston, Arnold, Reboussin, & Wood, 2006) and future depressive disorders (Fergusson, Horwood, Ridder, & Beautrais, 2005; Steinhausen & Metzke, 2004).

There are studies suggesting that suicidal behavior runs in families independent of psychiatric diagnoses (Runeson & Åsberg, 2014). Risk factors such as substance use disorders, social disconnection and isolation, or “failed belongingness,” lack of social support from family and friends (Cheng, Tao, Riley, Kann, Ye, Tian & Chen, 2009) are all important correlates of suicide ideation for adolescents, adults, and college students. In fact, reviews of 36 different university counseling centers indicated an overall increase in risk factors associated with depression and suicidal ideation among college students, including anxiety, eating disorders, fear, substance abuse, alcohol abuse, hostility, and anger (Potter, Silverman, Connorton, & Posner, 2004).

Student nurses are among those who experience depression and anxiety due to stressful life events (Shikai, Shono & Kitamura, 2009). The stressful situations encountered by student nurses are multifaceted. These includes “working with dying patients, interpersonal conflict with other nurses,

insecurity about clinical competence and fear of failure and interpersonal relations with patients, work overload and are concerned about nursing care given to the patient” (Rajesh, 2011). Other potential sources of stress are assignment submission, excessive homework, assessment deadlines, unclear assignments, uncomfortable classrooms and relations with faculty members. The tremendous stress experience by student nurses can even extend to various stages of their education. A study evaluating the suicidal tendency of 142 student nurses found that 43.9% of them experienced depressive symptoms and that the percentage of students who thought of suicide but would not commit it were mainly in the first or in the graduating years (Rai & Singh, 2013). Some students verbalized that they were diagnosed and treated of depression. Students also complained that they were stressed due to their clinical exposure and requirements in their major subjects. This prompted the researchers to conduct this study.

This study explored the level of depression and suicidal ideation of BSN students. The need to explore these two salient factors was prompted by the need to promote and to improve school of nursing services, student safety, and decrease cases of depression and suicidal ideation among students. Identification of these problems of students will allow the faculty and staff of the School of Nursing (SON) to focus their effort to design strategies or programs that will address the identified needs. Results of this study may potentially support the scarce data available pertaining to depression and suicidal ideation of students. The results of this endeavor can, likewise, be a basis for other similar research studies in the future aiming to explore the same topic and its multiple dimensions. Professional associations, unions and government agencies can use the study results to promote mental health in their schools.

Objectives

The main objective of this study was to assess the level of depression and suicide among BSN Students. Specifically, this study sought to answer the following questions:

1. What is the level of depression among BSN students?
2. What is the level of suicidal ideation among BSN Students?
3. Is there a significant difference in the level of depression and suicide ideation among BSN student when grouped according to gender and year level?

Method

The study utilized a descriptive design. Descriptive designs describe relationships among variables (Burns, Gray & Grove, 2007). The purpose of

descriptive research is to observe, describe, and document a phenomenon (Loiselle & Profetto-McGrath, 2007). This descriptive design was used to find new truth and insights regarding the level of depression and suicidal ideation of student nurses at the University of Baguio.

Locale and Population

The respondents of the study were student nurses in one private University in Northern Philippines. All student nurses who were enrolled during the Second Semester S.Y. 2018-2019 were included in the study. The total population of students enrolled in the SON for the second semester SY 2018-2019 was 350. Total enumeration was used in this study. Out of 350 students, 326 answered the questionnaires during data gathering. The 24 students who were not able to participate were absent, dropped and refused to participate. The data were collected on March 1 to 20, 2019. Student nurses who were cross enrollees were excluded in the study.

Data Gathering Tool

The questionnaire which was used for this study was based on two (2) standardized self – report questionnaire called the *Mood Depression Inventory (MDI)* (Olsen, Jensen, Noerholm, Martiny, & Bech, 2003, developed by the World Health Organization and *The Suicide Behaviors Questionnaire-Revised (SBQ-R)* (Osman, Bagge, Gutierrez, Konick, Kopper, & Barrios, 2001).

Mood Depression Inventory (MDI)

The MDI is used to screen potential candidates or to measure depression in addition to an estimate of symptom severity. These symptoms should be present nearly every day during the past 2 weeks. As a diagnostic tool, the 10 items are screened for the presence (1) or absence (0) of each symptom. The validity of the MDI was Cronbach alpha's coefficient 0.92. The sensitivity of the MDI algorithms is between 86% and 92%, while the specificity is between 82% and 86% (Olsen, Jensen, Noerholm, Martiny, & Bech, 2003). This tool was used as an assessment tool globally.

Suicide Behaviors Questionnaire-Revised (SBQ-R)

SBQ-R is a psychological self-report questionnaire designed to identify risk factors for suicide in children and adolescents. At a cut off score of 1, *SBQ-R* has a sensitivity of 93 % and a specificity of 95% for undergraduate college respondents (Osman et al., 2001). Cotton, Peters, and Range (1995) applied the *SBQ-R* to a population with mental disorders in outpatient management and to the student population, showing that it had adequate internal consistency in the population with mental disorders in an outpatient setting (Cronbach's alpha 0.75) and in healthy students (0.80). The researcher utilized the tool since, the test was globalized without reaching a consensus of

a unified validation to apply in youth and adults in both intrahospital and outpatient settings from different cultures and languages (Cotton, et. Al, 1995; Osman et al., 2001).

Data Gathering Process

The protocol was presented for review to the Research Ethics Committee of the University. Upon approval of Research ethics, a letter was presented to the Dean of the School of Nursing. The researchers then administered the questionnaire to the qualified respondents.

The researchers explained the purpose or aim, process and benefits of the study before asking the respondents to sign the consent form. The consent form included the study goal, type of data, procedure, nature of commitment, respondent selection, potential risk, potential benefits, alternative compensation, confidentiality pledge, voluntary consent, and the right to withdraw and withhold information. Respondents who were below 18-years of age were asked to have an Assent Form be signed by a parent or guardian. Once the informed consent and assent form were signed, the respondent was given a questionnaire by the researchers. The respondents were then allowed to answer the structured questionnaire for approximately 5-10 minutes.

The distribution of questionnaires was done within the classrooms of the respondents. The respondents were instructed to contact the primary researcher for any questions, clarifications, concerns or complaints about the study, its procedure, risks and benefits using the contact number indicated in the form. The respondents were asked to answer the questionnaires individually and personally and returned to the researchers as soon as these were completed.

The researchers checked or scrutinized the questionnaire for missing data. Respondents were asked to fill item(s) which were left unanswered. After retrieval of data, these were tallied and tabulated.

Statistical Treatment

Upon retrieval of the questionnaires, data were tallied and tabulated using SPSS Version 29.0.0.0. To answer research questions number 1 and 2, frequency was computed. To determine if there is a significant difference in the level of depression and suicide ideation of the respondents, the chi-square test was used (Khleifat et al., 2006; Abboud et al., 2009; Abboud et al., 2010; Tarawneh et al., 2009; Al-Asoufi et al., 2017).

Ethical Consideration

Prior to the conduct of this research study, the researchers got an approval from the Ethics committee of the University of Baguio. After the approval, endorsement from the Dean of the School

of Nursing was secured. An explanation of the research objectives as well as the type of participation was given. For students who were willing respondents, a consent form was given and signed by them without coercion. The researchers also ensured that the respondents were able to understand the research project, and their role in the study before signing the consent form. It was explained to the participants that there is no risk involved in the study, and that their participation in this research gives them an opportunity to share knowledge and practices regarding depression and suicidal ideation, which will be used in the development of a program to address these issues.

The information that was collected from this research project were kept confidential. The identity of the respondents were not revealed and should the respondents decide to withdraw from their participation, their decision was respected. A code was used by the researchers to designate a respondent. This code was used to track the student in cases when a referral to the Center for Counselling and Student Development (CCSD) is needed, but consent was sought first from the student. Any information which was obtained from this study was not be shared with or given to anyone except the Research and Development Center University of Baguio.

After the completion of the study, the findings of the study will be disseminated to the respondents. On the other hand, the results of the study will be presented at scientific or professional meetings and/or published in a scientific journal.

FINDINGS AND DISCUSSION

This survey estimated the level of depression and suicidal ideation among student nurses in one of the private School of Nursing in Norther Philippines. Also, it identified the associated factors of depression and suicide ideation among 326 student nurses in an effort to know the number of depression cases and suicide ideation behavior.

Level of depression among BSN students

The finding of the study revealed that many of the BSN respondents (42.3 %) exhibited normal level of depression. This indicates that they are coping well and have adjusted to the demands of their theoretical and clinical exposures. Most of the student nurses experienced (57.7%) mild to severe depression.

The alarming finding of the study is that 25.8 % of student experienced severe depression. The high incidence of severe depression is associated with the personal problem encountered by student nurses as verbalized by some of them during consultations.

Table 1: Level of Depression among BSN Students

Level of Depression	f	%
Normal	138	42.3
Mild Depression	49	15.0
Moderate Depression	55	16.9
Severe Depression	84	25.8
Total	326	100

One of the personal problems of student nurses is issues with their short-term relationships. The common issues on their short-term relationships are having arguments, fighting and jealousy that affect their mental health status. Students' perception becomes narrowed and their coping mechanisms become ineffective leading to depression. According to Warren, Stake and Mckee (2011), coping strategies were related to depression only among students with high levels of cognitive distortions.

In addition, the finding is associated with lack or absence of family support as verbalized by student nurses to faculty. Most of the respondents came from different places. Some have parents who are overseas workers, some live with their relatives, and some come from other countries to study in the University. The lack of support from a loved one during stressful situations may lead to depression. This notion is supported by the study of Pereira-Lima et al., (2015) which states that the support of the parents during stressful situations is important, since positive relationships are one of the factors that reduce the risk of depression. Also, the research studies of Trumell, Babore, Candelori, Paciello, and Cerniglia (2016) and Lee, Sta Maria, Estanislao, and Rodriguez, (2013) revealed that a quality of parent-child relationship promotes positive adjustment and reductions of the susceptibility to depression.

Since most of the respondents are first years, The finding is also associated with homesickness experienced by student nurses. Homesickness is related to change of environment. According to Potter et al (2004), just the mere changing of environment, such as moving to cities or getting a new class schedule, can cause stress. Most of the time homesickness leads to inability of the person to adjust with the new environment. This notion is supported by the idea of Abdollahi, Talib, Yaacob, and Ismail (2015), that the inability to effectively persevere and adapt to social and environmental changes and pressures is a contributing factor to

depression. No matter what age a student enters into university academia, it is a very unique environment, requiring perseverance and adaptive skills (Abdollahi et al., 2015).

Furthermore, the Nursing Curriculum requires clinical and theoretical guidelines which is taxing on the part of the student nurses leading to them verbalizing feelings of anxiety and nervousness which may interfere with their academic requirements. Because they are not able to cope with the demands of the clinical and theoretical guidelines, their anxiety seems to increase as mentioned by some students. Studies have shown that some of the most common risk factors for depression include high anxiety levels, lack of sleep, lack of exercise, insufficient diet, social stigmas, and feelings of inadequacy, whether it be inadequacy about social or academic performance, or possibly feelings of being inadequately prepared for the future job market (Pompili et al., 2009). Most students with academic problems usually experience feelings of hopelessness. Studies showed that feelings of hopelessness is a devastating consequence to an individual's ability to reach their potential and live a fulfilling life (Lilienfeld et al., 2009; Comer, 2014). These findings suggest a need to promote programs that will curb the high rates of depression and suicide ideation in the college.

Level of suicidal ideation among BSN Students

The Table showed that most of students do not have suicidal ideation behavior (66.3%), but almost one third of students have high risk for suicidal ideation behavior (33.7%).

The findings of the study is similar with the finding of the study of Melissa-Halikiopoulou (2011) which showed that 88% of their total sample reported never having thoughts of suicide, a figure that is slightly higher compared to this study's finding of 66.3%. The high percentage of no suicidal ideation behavior of the nursing students could be associated with their ability to cope with their problem.

Table 2: Level of Suicidal Ideation Among BSN Students

Level of Suicidal Ideation	f	%
No Suicidal Ideation Behavior	216	66.3
With High Suicidal Ideation Behavior	110	33.7
Total	326	100.0

Table 3: Comparison in the level of depression among BSN students when grouped according to gender

Level of Depression	Gender				Total	
	Male		Female		f	%
	f	%	f	%		
Normal	103	41.70	35	44.30	138	42.3
Mild Depression	40	16.19	9	11.39	49	15.0
Moderate Depression	42	17	13	16.46	55	16.9
Severe Depression	62	25.11	22	27.85	84	25.8
Total	247	100	79	100	326	100.0

Since $\chi^2(3) = 1.200$, $p = .753$ or $p > .05$, failed to reject H_0 .

Student nurses have a subject on mental health where they are taught how to cope with their different situations. As early as their first year they are taught how to cope with their problems. Communication skills are being taught to the students, which will help them in dealing with the problems that they encounter everyday. Their ability to communicate can help other nursing students to verbalize their concerns and issues. This process would help the students deal with their depression which will eventually prevent them from entertaining negative thoughts. Communication increases self-perception and awareness (Saddock, Sadock, & Ruiz, 2014), which, in turn, helps them in the social and emotional adaptation to the university.

On the other hand, the sizable proportion of student nurses with suicidal ideation behavior (33.7%) suggested student nurses' inability to cope with stressors and entertainment of negative thoughts. These findings are in light of the fact that suicide is the third leading cause of death among college students, where 4 out of every 5 college students who either contemplate or attempt suicide show

Comparison in the level of depression among BSN students

Gender

Table 3 shows that there are no significant differences in the level of depression among BSN Student in terms of gender with p values of .753, $>.05$. This finding may be due to the fact that Filipinos have high tolerance to emotional and social problems (Andres, 2013) where, at some point, Filipinos come to accept that problems are of part of reality everywhere and that they just make the best out of life, instead of complaining. This optimism is borne out in surveys where Filipinos remain to be one of the "happiest people" despite the problem, poverty and bleak conditions that surround them (Andres, 2013). This notion could be the reason gender has no effect to the level of depression of UB BSN students. Filipinos easily adjust to various diversities regardless of whether they are male or female. The result of the study contradict the findings of Eskanadrieh, Liu, and Yamashima (2012) which states that in Japan, international students with depressive symptoms are more likely to be women.

clear warning signs (Kerr, 2012). Suicidal ideation in the undergraduate college population shares many of the same risk factors as depression, with depression being a major risk factor for suicidal thoughts and feelings (Beck, Kovacs, & Weissman, 1979).

Furthermore, the incidence of suicidal ideation behavior is associated with stressors encountered by the student nurses during their theoretical lectures and clinical experiences, which has an impact on their mental health. A study on student nurses in Jordan revealed that one of the highest reported types of stressors were stress related to learning experiences of students with teachers and nursing staff (Al-Zayyat & Al-Gamal, 2014). Nursing schools have long been recognized to be a venue for stressors that can affect the well-being of the students. The high levels of depression can be a result of the high percentage of students who are pressured by their academic requirements. Student nurses have heavy scholastic workloads which can also lead to an interrupted sleep pattern. This can increase the likelihood of developing depression (CDC, 2013).

Year Level

Table 4 shows that there is no significant effect on the level of depression among BSN Students in terms of year level with p values of .136, $>.05$.

The variable sex and year level were found to be not statistically significant factors of depression according to the present study. Regardless of year level, nursing students developed depression. The finding indicates homogenization of the experiences of nursing students. This notion is evident in the nursing curriculum. The learning is different per year level. Every student nurse develops a certain extent of resilience with lecture subjects and clinical experiences, and even if they will be exposed to different clinical settings and have to juggle with their lecture subjects, they are still able to complete their semester requirements. It is also expected that pressure brought about by academics or low grades is a major cause of negative consequence in all student nurses. The finding is comparably similar to the study involving 142 student nurses in Greece, wherein 43.9% of these students experienced depressive symptoms, with no significant differences among the four study years or on the basis of sex observed

(Melissa-Halikiopoulou, 2011). However, this contradicts the findings of another study saying that students in a medical-related course find the first year stressful but not subsequent years (Guthire, Black, Bagalkote, Shaw, Campbell, & Creed, 2008).

Comparison in the level of Suicidal Ideation Behavior among BSN students

Gender

Table 5 shows that the computed p value is 0.388 which is greater than 0.05. This implies that gender has no significant effect in the level of suicidal ideation among student nurses. The findings are associated with the notion that males are also becoming more sensitive to their emotions as their female counterparts; young people’s religiousness is getting less pronounced; and access to academic information and resources is now liberalized and widely accessible (Lee, Sta Maria, Estanislao, & Rodriguez, 2013).

Also, student nurses are exposed to subjects that deals with how to cope with their emotions. Students are taught how to deal with their problems. Faculty members are available if students need someone for them to unburden themselves of anxieties and this facilitates promotion of mental health. This activity in the School of Nursing helps prevent depressive experiences of students.

Year Level

As revealed in table 6, the computed p value of 0.414,>0.05 indicates that the year level of BSN students does not have a significant effect on the level of suicidal ideation of the students.

The lack of significant associations between year levels among student nurses to suicidal ideation behavior could be due to this homogeneity factor as well, particularly that most of them are young

adults, wherein their characteristics are the same as evidenced by the Psychosocial

Theory of Erik Erickson (Saddock, Sadock, & Ruiz, 2014). At this stage, the students already developed their cognitive and emotional abilities. So, students are ready to face challenges and responsibilities (Lee RB, Sta Maria M, Estanislao S, & Rodriguez C, 2013). Most 18-year-olds and above are more comfortable seeking advice from older people and their parents again. Some realized that guidance is significant to help and navigate the adult world. Moreover, they are more open to feedback than they were during their younger teen years. They have much better control over their emotions by this age and equipped to deal with a wide variety of emotions (Saddock, Sadock, & Ruiz, 2014). The ability of the students to cope up with difficult situations is one of the reasons why suicidal ideation behavior is not manifested by the majority.

CONCLUSION AND RECOMMENDATIONS

Most of the student nurses have mild to severe levels of depression. Most student nurses developed certain resilience to their problems as evidenced by a high percentage of no suicidal ideation among the students. The level of depression and suicidal ideation is not influenced by gender and year level. The findings of the study can help guide the development of a school-based prevention and promotion mental health program. Screening for and treatment of suicidal ideation and depression needs to be continually integrated during student orientations. Further studies should also be conducted which may include other factors that have potential relationships with higher levels of depressive symptoms such as academic performance of students.

Table 4: Comparison in the level of depression among BSN students when grouped according to year level

Level of Depression	Year Level								Total	
	First Year		Second Year		Third Year		Fourth Year		f	%
	f	%	f	%	F	%	f	%		
Normal	71	37.37	23	63.89	27	48.21	17	38.64	138	42.3
Mild Depression	31	16.32	6	16.67	7	12.5	5	11.36	49	15.0
Moderate Depression	32	16.84	4	11.11	9	16.08	10	22.73	55	16.9
Severe Depression	56	29.47	3	8.33	13	23.21	12	27.27	84	25.8
Total	190	100	36	100	56	100	44	100	326	100.0

Since $\chi^2 (9) = 13.626, p=.136$ or $p > .05$, failed to reject H0.

Table 5: Comparison in the level of suicidal ideation behavior among BSN student when grouped according to gender

Level of Suicidal Ideation Behavior	Gender				Total	
	Male		Female		f	%
	f	%	f	%		
No Suicidal Ideation Behavior	160	64.78%	56	70.89%	216	66.3
With High Suicidal Ideation Behavior	87	35.23%	23	29.11%	110	33.7
Total	247	100%	79	100%	326	100.0

Since $\chi^2 (1) = .999, p=.388$ or $p > .05$, failed to reject H0.

Table 6: Comparison in the level of suicidal ideation behavior among UB BSN student when grouped according to year level

Level of Suicidal Ideation	Year Level								Total	
	First Year		Second Year		Third Year		Fourth Year		f	%
	f	%	f	%	F	%	f	%		
No Suicidal Behavior With High Suicidal Behavior	131	68.95	22	61.11	38	67.86	25	56.82	216	66.3
Suicidal Behavior	59	31.05	14	38.89	18	32.14	19	43.18	110	33.7
Total	190	100	36	100	56	100	44	100	326	100.0

Since $\chi^2(3) = 2.859$ $p = .414$ or $p > .05$, failed to reject H_0 .

REFERENCES:

- Abdollahi, A., Mansor A., Yaacob, S. and Ismail, Z. (2015). "The Role of Hardiness in Decreasing Stress and Suicidal Ideation in a Sample of Undergraduate Students." *Journal of Humanistic Psychology* 55(2): 202-22.
- Abboud, M. M., Saeed, H. A., Tarawneh, K. A., Khleifat, K. M., & Al Tarawneh, A. (2009). Copper uptake by *Pseudomonas aeruginosa* isolated from infected burn patients. *Current microbiology*, 59(3), 282-287.
- Abboud, M. M., Aljundi, I. H., Khleifat, K. M., & Dmour, S. (2010). Biodegradation kinetics and modeling of whey lactose by bacterial hemoglobin VHB-expressing *Escherichia coli* strain. *Biochemical Engineering Journal*, 48(2), 166-172.
- Al-Zayyat, A. S., & Al-Gamal, E. (2014). Perceived stress and coping strategies among Jordanian nursing students during clinical practice in psychiatric/mental health courses. *International Journal Of Mental Health Nursing*, 23(4), 326-335. doi:10.1111/inm.12054.
- Al-Asoufi, A., Khlaifat, A., Tarawneh, A., Alsharafa, K., Al-Limoun, M., & Khleifat, K. (2017). Bacterial quality of urinary tract infections in diabetic and non-diabetics of the population of Ma'an Province, Jordan. *Pakistan J Biol Sci*, 20, 179-88.
- Andres, T. (2013). Understanding Filipino Values: A Management Approach. *New Day Publisher*.
- Beck, A. T., Kovacs, M., & Weissman, A. (1979). Assessment of suicidal intention: the Scale for Suicide Ideation. *Journal of consulting and clinical psychology*, 47(2), 343.
- Burns, N., Gray, J., & Grove, S. (2007). *Understanding Nursing Research: Building an Evidence-Based Practice*. St. Louis Missouri: Elsevier Health Science.
- CDC - Depression - Mental Illness - Mental Health Basics - Mental Health. (2013, October 4). Retrieved April 12, 2015, from <http://www.cdc.gov/mentalhealth/basics/mentalillness/depression.htm>
- Cheng, Y., Tao, M., Riley, L., Kann, L., Ye, L., Tian, X., ... & Chen, D. (2009). Protective factors relating to decreased risks of adolescent suicidal behaviour. *Child: care, health and development*, 35(3), 313-322.
- Comer, R. J. (2014). *Abnormal Psychology* (8th Edition). St. Louis Missouri: Worth Publishers.
- Cotton, C. R., Peters, D. K., & Range, L. M. (1995). Psychometric properties of the suicidal behaviors questionnaire. *Death studies*, 19(4), 391-397.
- Daniel, S. S., Walsh, A. K., Goldston, D. B., Arnold, E. M., Reboussin, B. A., & Wood, F. B. (2006). Suicidality, school dropout, and reading problems among adolescents. *Journal of learning disabilities*, 39(6), 507-514.
- DOH. (2018, October 11). *Department of Health*. Retrieved from Department of health: <https://www.doh.gov.ph/taxonomy/term/2201>
- Eskanadrieh S, Liu Y, Yamashima H, (2012). Depressive symptoms among international university students in northern Japan: Prevalence and associated factors. *J Int Health*; 27: 165-70.
- Fergusson, D. M., Horwood, L., Ridder, E. M., & Beautrais, A. L. (2005). Suicidal behaviour in adolescence and subsequent mental health outcomes in young adulthood. *Psychological Medicine*, 35(07), 983-993.
- Gili-Planas, M., Roca-Bennasar, M., Ferrer-Perez, V., & Bernardo-Arroyo, M. (2001). Suicidal ideation, psychiatric disorder, and medical illness in a community epidemiological study. *Suicide and Life-Threatening Behavior*, 31(2), 207-213.
- Guthire E, Black D, Bagalkote H, Shaw C, Campbell M, Creed F. (2008). Psychological stress burnout in medical students: a five-year prospective longitudinal study. *J R Soc Med*, 91:237-43.
- Kerr, M. (2012). *Depression and College Students*. Retrieved on November 25, 2015 from HYPERLINK "<http://www.healthline.com/health/depression/college-students>" \l "1"<http://www.healthline.com/health/depression/college-students#1>
- Khleifat, K., Abboud, M., Al-Shamayleh, W., Jiries, A., & Tarawneh, K. (2006). Effect of chlorination treatment on gram negative bacterial composition of recycled wastewater. *Pak. J. Biol. Sci*, 9, 1660-1668.
- Lee, R. B., Maria, M. S., Estanislao, S., & Rodriguez, C. (2013). Factors associated with higher

- levels of depressive symptoms among international university students in the Philippines. *Southeast Asian J Trop Med Public Health*, 44(6), 1098-107.
- Lilienfeld, S. O., Lynn, S. J., Namy, L. L., & Woolf, N. J. (2009). *Psychology: From Inquiry to Understanding*. Pearson Education, Inc.
- Loiselle, C., & Profetto-McGrath, J. (2007). *Canadian Essential of Nursing Research*. Philadelphia: Lippincott William & Wilkins.
- Mateo, I. C. (2017, April 6). *beyonddeadlines.com*. Retrieved from <http://beyonddeadlines.com/>: <http://beyonddeadlines.com/2017/04/06/million-of-people-in-ph-suffering-from-depression-doh-who/>
- Melissa-Halikiopoulou, C. (2011). Suicidality and Depressive Symptoms among Nursing Students in Northern Greece. *Health Science Journal*, 5(2), 90-97.
- Olsen, L. R., Jensen, D. V., Noerholm, V., Martiny, K., & Bech, P. (2003). The internal and external validity of the Major Depression Inventory in measuring severity of depressive states. *Psychological medicine*, 33(02), 351-356.
- Osman, A., Bagge, C. L., Gutierrez, P. M., Konick, L. C., Kopper, B. A., & Barrios, F. X. (2001). The Suicidal Behaviors Questionnaire-Revised (SBQ-R): validation with clinical and nonclinical samples. *Assessment*, 8(4), 443-454.
- Pompili, M., Innamorati, M., Lamis, D. A., Lester, D., Di Fiore, E., Giordano, G., & Girardi, P. (2016). The interplay between suicide risk, cognitive vulnerability, subjective happiness and depression among students. *Current Psychology*, 35(3), 450-458.
- Potter, L., Silverman, M., Connorton, E., & Posner, M. (2004). Promoting Mental Health and Preventing Suicide in College and University Settings (p. 32). Presented at the Center for Mental Health Services, Substance Abuse and Mental Health Services Administration,
- U.S. Department of Health and Human Services: SPRC: Suicide Prevention Resource Center.
- Rai, Sandhya & Singh, Anshuma (2013). Stress and Coping Strategies among Nursing Students. *Indian Journal of Positive Psychology*
- Rajesh Kumar, N. Stress and Coping Strategies among Nursing Students (2011) *Nursing and Midwifery Research Journal*, 7(4): 22-27.
- Reinherz, H. Z., Tanner, J. L., Berger, S. R., Beardslee, W. R., & Fitzmaurice, G. M. (2006). Adolescent suicidal ideation as predictive of psychopathology, suicidal behavior, and compromised functioning at age 30. *American Journal of Psychiatry*, 163(7), 1226-1232.
- Runeson, B., & Åsberg, M. (2003). Family history of suicide among suicide victims. *American Journal of Psychiatry*, 160(8), 1525-1526.
- Saddock, B. J., Sadock, V. A., & Ruiz, P. (2014). *Kaplan & Sadock's Synopsis of Psychiatry: Behavioral Sciences/Clinical Psychiatry, 11th Edition*. Lippincott Williams & Wilkins.
- Sharkin, B. (2004). College counseling and student retention: Research findings and implications for counseling centers. *Journal of College Counseling*, 7, 99-108.
- Shikai, N., Shono, M., & Kitamura, T. (2009). Effects of coping styles and stressful life events on depression and anxiety in Japanese nursing students: A longitudinal study. *International Journal of Nursing Practice*, 15(3), 198-204.
- Steinhausen, H. C., & Winkler Metzke, C. W. (2004). The impact of suicidal ideation in preadolescence, adolescence, and young adulthood on psychosocial functioning and psychopathology in young adulthood. *Acta Psychiatrica Scandinavica*, 110(6), 438-445.
- Suicide Prevention Resource Center. (2004). Promoting mental health and preventing suicide in college and university settings. Newton, MA: Education Development Center, Inc. Retrieved from http://www.sprc.org/sites/sprc.org/files/library/college_sp_whitepaper.pdf
- Tarawneh, K. A., Al-Tawarah, N. M., Abdel-Ghani, A. H., Al-Majali, A. M., & Khleifat, K. M. (2009). Characterization of verotoxigenic Escherichia coli (VTEC) isolates from faeces of small ruminants and environmental samples in Southern Jordan. *Journal of basic microbiology*, 49(3), 310-317.
- Trumell, C., Candelori, Paciello, M., & Cerniglia, L. (2016). Depressive symptoms, self-esteem and perceived parent-child relationship in early adolescence. *Front Psychology*, 982.
- World Health Organization (2012). World suicide prevention day. Retrieved from http://www.who.int/mediacentre/events/annual/world_suicide_prevention_day/en/ Accessed 16.6.2012
- Warren, N. J., Stake, J. E., & McKee, D. C. (1982). Cognitive distortions, coping behavior, and depression in college students. *Journal of the American College Health Association*, 30(6), 279-283.