



Full Length Research Paper

Stress and Coping Among Nursing Students During Their Practical Education in Psychiatric Settings: A Literature Review

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This paper was aim to review studies about stress and coping among nursing students during their psychiatric clinical education. The search involved utilization of these databases: MEDLINE (Medical literature on-Line), CINAHL (Cumulative Index to Nursing and Allied Health Literature), PsycINFO (Psychology Information) and PubMed (Psychology Information). The review included those studies that published between 2004 and 2014; reported in English, and about psychiatric nursing clinical education. Five studies met the inclusion criteria. The results revealed that patients' care, relationships in clinical settings, and academic demands were considered the highest reported stressors. In terms of coping, the students usually utilized ineffective coping strategies to handle these clinical stressors. This review expands the existing knowledge concerning stress in clinical psychiatric settings and provides recommendations for future research. Nursing teachers should utilize the findings of this review to direct their students during clinical practice in psychiatric settings. This could help in promoting the quality of nursing education programs and improving the psychological health of the nursing students.

Keywords: clinical practice, coping, nursing students, psychiatric/mental health nursing, and stress.

INTRODUCTION

Overview

Stress has been acknowledged as a major mental health problem in the 20th century (Kaplan, Madden, Mijanovich, and Purcaro, 2013). Literature defined stress from three perspectives; response-based (i.e., resulting from an individual's reactions to stressors), stimulus-

based (i.e., outcomes of stressors), or as interactive (i.e., resulting from interplay between stressors and human's reactions) (Fortinash and Holsay-Worret, 2012). Stress can lead to both positive and negative effects on humans (Behere, Yadav, and Behere, 2011; Burnard et al., 2007). As a positive effect, stress empowers us toward accomplishment (Behere et al., 2011). This effect called as "eustress" according to Selye (1976). As a negative effect, researchers reported that harmful impacts of stress could be categorized into three classes: physical problems, such as infections, headache, insomnia, and ulcers; psychological problems, such as anxiety, anger,

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and burnout; in addition to behavioral problems, such as isolation, smoking, and drug abuse (Boyd, 2012). This effect called as “distress” according to Selye (1976).

Several studies have been investigated stress among undergraduate university students in many countries (Al-Zayyat and Al-Gamal, 2014; Besser and Zeigler-Hill, 2014; Pillay and Ngcobo, 2010). Students have many stressors from a wide range of sources in their academic life, usually they respond to these stressors in various manners (Hamaideh, 2011). The main sources of stress among undergraduate students might contain: academic loads (Elias, Ping, and Abdullah, 2011), peer pressure (Floyd, 2010), being outside home (Seyedfatemi, Tafreshi, and Hagani, 2007), financial demands (Pillay and Ngcobo, 2010), transition to a new developmental phase (Brinkworth, McCann, Matthews, and Nordström, 2009), and difficulty coping in a new social environment (Gadzella, 2004).

Nursing students have received good attention from the researchers who study stress (Pulido-Martos, Augusto-Landa, and Lopez-Zafra, 2012). Pryjmachuk and Richards (2007a) reported that there are three sources of stress among nursing students: academic source incorporate assessments and examinations, the workload, and fear of failure; clinical source incorporate initial clinical experience, fear of committing errors, death and dying of patients, and students’ relations with other health care providers; and personal/social sources incorporate lack of free time and finances.

Stress in Psychiatric Nursing Education

Literature revealed that nursing students perceive complicated clinical stressors if they have clinical training in psychiatric facilities (Ewashen and Lane, 2007). Indeed, this is maybe attributed to the stigma that is robustly associated with those persons who have psychiatric illnesses (Happell and Gough, 2007; Stuart, 2009). This unfavorable attitude can deter students’ education, have a destructive effect on their establishment of healing relationships with clients, and produce emotional distress (Penn, 2008). As a result, the worldwide literature signifies that a little number of nursing students select this specialty as a future career choice post graduation (Happell 2008; Happell and Gough, 2007; Spence, Garrick, and McKay, 2012). Karimollahi (2011) stated that nursing students recurrently engage into clinical part of Psychiatric/Mental Health Nursing (PMHN) courses with the mental image of “fear of unknown”. Furthermore, those students are often overwhelmed by family advice to “Be careful!” when dealing with psychiatric clients (Halter, 2008). Nolan and Ryan (2008) reported that major types of stress during the PMHN clinical education were related to clinical education workload, relations with others in the training wards; responsibility and competency; and simultaneous

academic and clinical pressure. Therefore, the current review paper was conducted to provide an understanding of the stressors among nursing students during their clinical education in psychiatric settings.

Coping in PMHN Education

Generally, nursing students cannot stay away from the clinical stressors; nevertheless, their coping has been acknowledged as a balancing factor that may help them in keeping psychosocial adaptation throughout stressful conditions (Seyedfatemi et al., 2007). AL-Zayyat and Al-Gamal (2014) conducted a longitudinal study with a random sample of 65 undergraduate Jordanian nursing students trained in psychiatric settings. The results showed that nursing students utilized different coping strategies to deal with stress that inherent in their psychiatric experience. Those students who utilized avoidance or transference strategies (such as avoiding difficulties during clinical practice, expecting others to solve the problem, quarreling with others and losing temper, or having a big meal and taking a long sleep) perceived more clinical stress than those who utilized problem solving coping strategies (such as setting up objectives to solve problems, finding the meaning of stressful incidents, adopting different strategies to solve problems and employing past experience to solve problems). The aim of this review paper was to critically review studies related to degrees of stress, type of stressors and types of coping strategies among undergraduate nursing students during their clinical education in psychiatric settings.

Significance of The Review

Nursing students’ psychological condition has an immediate impact on their daily life, their academic performance, the quality of their upcoming nursing work and even the steadiness of the nursing team (Luo and Wang, 2009; Ni et al., 2010). Accordingly, the psychological condition of the nursing students has become the hot point of current research studies (Luo and Wang, 2009). Taking into consideration that a number of former studies signify that stress is strongly related to psychological condition (Allen, Kennedy, Cryan, Dinan, and Clarke, 2014; Luo and Wang, 2009), as a result, it is an imperative issue to enhance our understanding of the nursing students’ stress experiences during PMHN clinical courses (AL-Zayyat and Al-Gamal, 2014). Moreover, it is essential to recognize whether the students are equipped adequately with successful coping skills to manage future clinical stress (Dhar, Walia, and Das, 2009).

It has been recognized that clinical practice in PMHN field is highly stressful for nursing students (Szapak and

Kameg, 2011). Therefore, it's valuable for clinical nursing teachers to identify existing stressors in the psychiatric practice settings and to recognize the students' coping strategies (Prymachuk, and Richards, 2007b). This knowledge is very helpful in planning effective clinical teaching programs for nursing students who undertake their training in psychiatric settings (Nolan and Ryan, 2008). Consequently, nursing students become more able to use themselves therapeutically and, in that case, the quality of patient care will be improved (Karimollahi, 2011). To conclude, the findings of this review will possess significant recommendations for mutually practice and research. This review will present empirical data that can be utilized by nursing educators to enhance their understanding of the nature of PMHN clinical stressors, to help their students to deal effectively with these stressors. Therefore, the quality of care that provided for psychiatric patients will be promoted.

METHODOLOGY

Search Strategy

A literature search is a search for information using a range of sources (Polit and Beck, 2008). To increase the rigor of systematic searching all related literature should be included and in that case the effect of bias in the review results can be controlled (Polit and Beck, 2013). The searches involved utilization of four databases which included CINAHL (Cumulative Index to Nursing and Allied Health Literature) since the issue of clinical stress was more probably to be handled by allied health professionals and nurses; MEDLINE (Medical literature on-Line) because it covers worldwide literature on medicine incorporating allied health, humanities, physical and biological sciences; PubMed as it addresses the needs and concerns of health related disciplines; and lastly PsycINFO (Psychology Information) was consulted because it emphasizes on psychological areas of research like clinical stress. Key words included stress, undergraduate nursing students, clinical practice, coping, and PMHN in diverse combinations.

Eligibility Criteria of This Review

Studies were included in this review based on the subsequent inclusion criteria: published between 2004 and 2014 to facilitate the selection of latest publications that may have more relevance than earlier studies to today's clinical stressors among nursing students; reported in English; offers information regarding clinical practice stress among nursing students; and about PMHN clinical education. Inversely, the author excluded all studies reporting the effect of stress-reduction intervention(s) among nursing students because they are

outside the scope of this paper. All the included studies were undergone to a standardized approach of critical evaluation, based on their design, to verify the rigor and quality of the reported findings (Long, Godfrey, Randall, Brettle, and Grant, 2002). To guarantee a comprehensive and thorough search, and to make certain thorough inclusion of all arguments and themes, a broad range of information sources was accessed containing searching the campus library bibliography and a manual search through chosen journals that were not offered electronically. Several studies were identified (40 studies), but a few met the eligibility criteria (5 studies).

RESULTS

Overview

The author encountered several difficulties in comparing the identified studies. The nature of studies' samples, the utilized tools, and the responses' coding style, all these issues possibly hinder comparing the findings gained in different studies. Additionally, essential differences are existed internationally in the structure of undergraduate nursing programs particularly in the clinical parts of PMHN course. However, detailed findings of the current review were reported in terms of the following three subsections. Table 1 below summarizes studies that included in this review.

Relationship Between Stress and Coping in PMHN

In psychiatric clinical settings, nursing students face complex situations and problems that can lead to distress. Tully (2004) conducted a cross-sectional study with a convenience sample of 35 Irish psychiatric nursing students using 30-item General Health Questionnaire, Student Nurse Stress Index (Jones and Johnson, 1997), and Ways of Coping Questionnaire (Parkes, 1984). Findings illustrated that all the students were significantly distressed, with scores beyond the usual cutoff point of 5 on the 30-item General Health Questionnaire. Also, the students in the first year training were significantly less stressed than those in the second year. Regarding the stressors, the results showed that colleague competition, relations with staff, too much responsibility, and others were reported by the students as sources of stress. Moreover, the results showed that students, in general, had inadequate coping skills. Those students who utilized direct coping strategies perceived less distress than those utilizing less adaptive strategies such as avoidance. Given that the sample was convenience the results generalizability is limited.

In a recent published Jordanian study (Al-Zayyat and Al-Gamal, 2014) the authors employed a longitudinal design and used Perceived Stress Scale (Sheu et al.,

Table 1. Summary of the Studies Investigating PMHN Clinical Stress Among Nursing Students

Author(s) and Setting	n	Design	Instrument or Data Collection Method	Types of Clinical Stressors and Utilized Coping Strategies	Strengths and Limitations
Tully (2004), Ireland	35	Descriptive cross-sectional	30-item General Health Questionnaire $\alpha = 0.85$, Student Nurse Stress Index (Jones & Johnson, 1999) (22 items) $\alpha > 0.70$ and Ways of Coping Questionnaire (Parkes, 1984), (44 items)	Colleague competition, relations with staff, too much responsibility. The students used avoidance coping strategies to deal with these stressors.	The study is considered one of the initial studies that explore clinical PMHN stress among nursing students. Therefore, it serves as baseline for future studies. However, the sample size was small and convenience so the generalization is restricted (Polit & Beck, 2008). Moreover, the psychometric properties of Ways of Coping Questionnaire were not tested in this study.
Por (2005), UK	90	Descriptive cross-sectional	Expanded Nursing Stress questionnaire (French et al., 2000) (59 items) $\alpha = 0.85$	Stress in PMHN: insufficient emotional preparation, workload, problems with peers, patients and their families.	There are two learned lessons from this pilot study. First, the generality of Expanded Nursing Stress questionnaire with diverse subgroups of nursing students needs to be evaluated. Second, the large-scale study design needs to reveal the changing nature of the training environment and the associated stressors.
Nolan and Ryan (2008), Ireland	28	Cross-sectional triangulation	28-item of the General Health Questionnaire (Goldberg, 1978) $\alpha = 0.82$ and semi-structured interviews	Relationships in the clinical environment, matching competence and responsibility, clinical workload, and concurrent academic and clinical loads.	The utilized tool has strong psychometric properties. However, the use of cross-sectional design hinders the ability to track changes of stress experiences.
Karimollahi (2011), Iran	13	Hermeneutic phenomenological	Semi-structured interviews	Fear of violence, fear of unknown, erroneous beliefs concerning patients, peer effect, and media effect.	Exploring the lived experience of the nursing students about their clinical stress in psychiatric settings considered exclusive in the literature. However, since the interviews were used for data collection, there may be discrepancy between participants' responses and their real stressors and fears.
Al-Zayyat and Al-Gamal (2014), Jordan	65	Descriptive, correlational longitudinal	Perceived Stress Scale (Sheu et al., 1997) (29 items) $\alpha = 0.89$ and Coping Behavior Inventory (Sheu et al. 2002), (19 items) $\alpha = 0.74$	Providing care for patients, stress associated with teachers and nursing staff, and from assignments and workloads. To cope with these stressors, the students used problem solving strategies.	The using of longitudinal design enabled the researcher to measure the dynamic nature of stress. However, the data were collected in the lecture classroom from the available students, so students who were not present at that lecture might have had different responses on the study instruments.

1997) and Coping Behavior Inventory (Sheu, Lin, and Hwang, 2002) to address the PMHN clinical experience. The sample consisted of 65 undergraduate Jordanian nursing students whom were recruited randomly from five nursing schools at the middle part of Jordan. Data was collected from the participants at points of time: at pre-PMHN clinical course and at post PMHN clinical course. The students training in PMHN clinical course lasted for 12 weeks. They had training 2 days/week in the National Mental Health Center. Results demonstrated that the most reported stressors at both data collection times were: caring of the patients, teachers and nursing staff, and assignments and workloads. In terms of coping, the study illustrated that problem solving was the most utilized coping strategy at both data-collection times. Moreover, the findings showed that those students who utilized avoidance or transference coping strategies were reported higher degrees of clinical stress than other students. These findings are consistent with Tully (2004) who found similar results. However, this study has some limitations. The data were collected in the lecture classroom from the available students, so students who were not present at that lecture might have had different responses on the study instruments. Furthermore, the structured questionnaire may restrict the in-depth understanding of the students' reaction to stress and the ability to identify other strategies of coping. Integration of a qualitative part in further studies design may be helpful.

Qualitative Approach to Address PMHN Stress

Investigating clinical stress among nursing students using qualitative methods provide unique data in the literature (Karimollahi, 2011). Nolan and Ryan (2008) carried out a study with triangulation design to examine the perception of PMHN clinical stress among 28 Irish nursing students trained at one health facility. The 28-item of the General Health Questionnaire (Goldberg, 1978) was utilized to identify stress levels among participants. Moreover, the researchers conducted a few semi-structured interviews to identify the students' sources of stress. The results showed that nearly 48% of students had degrees of stress greater than the threshold score in accordance to Goldberg (1978), signifying levels of distress improbably to cure without intervention. Furthermore, the interviewed participants reported four main groups of stressors which were: relationships in the clinical environment, matching competence and responsibility, clinical workload, and concurrent academic and clinical loads. These students' stressors are consistent with the Tully (2004) findings. Overall, the number of students at the previously mentioned study was small, also the sample was convenience. Therefore, the findings cannot be generalized widely.

In the Iranian context, a hermeneutic phenomenological study was carried out to investigate the clinical experiences of nursing students in a one psychiatric hospital unit (Karimollahi, 2011). The author collected the data from the 13 participants through semi-structured interviews. In terms of clinical stress, the results revealed that participants found that the initial period of training in the psychiatric unit was very stressful. The following sub-themes were emerged from the analysis: 'fear of violence', 'fear of unknown', 'erroneous beliefs concerning patients', 'peer effect', and 'media effect'. On the other hand, the participants reported that during their training, the level of stress diminished and the fears moved out. This occurred because they adapted gradually to unit environment. This study gives rich data and holistic clarification concerning the PMHN clinical training stressors. However, since the interviews were used for data collection, there may be discrepancy between participants' responses and their real stressors and fears. In other words, the students may give socially attractive responses (Nieswiadomy, 2008).

Comparison between Stress in PMHN and other Nursing Fields

The nature of clinical area where the students train may affect their perceived stressors (Prymachuk and Richards, 2007b). Por (2005) conducted a pilot study to compare the sources and frequency of occupational stress among three groups of undergraduate nursing students. The sample consisted of 90 participants who were studying at one nursing school in London. The three groups of the study were represented by the participants' sub-specialties which were: adult health nursing, PMHN, and pediatrics nursing. The author used Expanded Nursing Stress questionnaire (French, Lenton, Walters, and Eyles, 2000) for data collection. The findings showed that three study groups were similar regarding the frequency of stress. However, there were discrepancies in the sources of stress that perceived by the three groups. The major stressors identified by PMHN students were: insufficient emotional preparation, workload, problems with peers, and patients and their families. This pilot study gives a number of basic issues which should be considered in the upcoming large-scale study. Nursing students in different hospital units have special sources of stress. Therefore, the generality of Expanded Nursing Stress questionnaire with diverse subgroups of nursing students needs to be evaluated. Moreover, because changes are regularly taking place in the workplace, the large-scale study design needs to reveal the changing character of the working environment and the stressors associated with those changes.

DISCUSSION

The Mainly Identified Stressors

Comparing finding among studies was not an easy task because of utilizing different tools and large number of reported stressors. However, providing care for the clients and their families, relationships in the clinical settings, and academic demands are recognized as the most encountered stressors. Consequently, the nursing teachers should perform several caring approaches that let their students manage these stressors successfully. Such approaches may include allocating simulation measures that allow nursing students to offer care for the patients with psychiatric illnesses before practicing in the real clinical context, preparing all personnel concerned in teaching and training of nursing students properly, providing more attention to the practical part of students' training, and decreasing the needed written work (Al-Zayyat and Al-Gamal, 2014).

Stressful Time of PMHN Practical Education

The identified literature emphasized the students' initial (early) period of clinical experience. It has been evident that several nursing students reported numerous difficulties throughout their initial PMHN clinical experience (Al-Zayyat and Al-Gamal, 2014; Karimollahi, 2011). It looks like that existed nursing programs did not train nursing students effectively to deal with this experience. Therefore, evaluating and restructuring nursing curricula is an essential issue for stakeholders in nursing education (Shaban, Khater, and Akhu-Zaheya, 2012). Offering video films regarding psychiatric clinical settings, scheduling recurrent field visits (throughout orientation phase), and calling expert guest speakers probably reduce the initial PMHN clinical stress (Penn, 2008).

Utilized Coping Strategies

The current review revealed that students coping experiences in psychiatric settings had received inadequate attention. Only two studies (Al-Zayyat and Al-Gamal, 2014; Tully, 2004) had addressed the types of coping strategies that utilized during PMHN clinical education. The finding of these studies illustrated that nursing students are not equipped with proper coping strategies to deal with clinical stress that inherent in their psychiatric experience. Moreover, avoidance and transference coping strategies hindered the students' ability in dealing with PMHN clinical stress effectively. Therefore, the clinical nursing teachers should discourage their students using these coping strategies and teach them about more effective coping strategies.

Implications of This Review

This review informs nursing students, clinicians, educators, and researchers about stress experiences of nursing students during their practical education in PMHN courses. The results of this review offer important implications for nursing education, administration and provide directions for future research.

Nursing Education

Clinical instructors, nursing lecturer, preceptors, and staff from diverse nursing sectors can use the results of this review to guide the students throughout their PMHN practical education. This could help in promoting the quality of nursing education programs and improving the psychological health of the nursing students (Pulido-Martos et al., 2012). As a result, the quality of care for the psychiatric patients will be promoted. Nursing teachers should offer supportive measures for their students since the initial period of their practical education (Shaban et al., 2012). Furthermore, nursing teachers should motivate nursing students to talk about their stressors and their feelings so as to present suitable interventions (Penn, 2008). Last of all, nursing teachers should engage in the communication skills courses that prepare them to deal properly with students (Al-Zayyat and Al-Gamal, 2014).

Nursing Administration

Hospitals' administrators necessitate setting up or promoting those strategies that enforce creating a training milieu where students are supported, protected, and encouraged while they performing their training in psychiatric settings. Besides, hospitals' administrators need to inspire their staff to enroll in those continuous education programs that address staff -students' affiliations. Nursing schools' administrators supposed to launch a student support system that aim to equip the nursing students with successful coping methods.

Future Research

To increase the consistency between the reported findings in different studies, it is recommended that researchers carry out methodological studies that establish and refine a standardized tool for evaluating clinical stress during PMHN practical education (Pulido-Martos et al., 2012). Given that the current literature addressed negative aspects of clinical stress, investigating the eustress impacts of clinical stress in PMHN is suggested for future studies (Gibbons, 2010). More research is required to examine the insight of

clinical educators about the stressors encountered by nursing students throughout their practical education in PMHN courses (Penn, 2008).

LIMITATIONS OF THIS REVIEW

This review contributes to the existing knowledge in the area of stress and coping among nursing students by identifying students' experiences during their practical education in PMHN. Nevertheless, the next few limitations were recognized. Initially, the precondition is that the review included those studies that published in English might have excluded worthy data written in other languages. Moreover, the variation of the identified studies concerning the utilized tools, sample characteristics, and the dissimilarities in the operational description of clinical stress may hinder the generalizability of the review findings.

CONCLUSION

This review paper addressed stress and utilized coping strategies among nursing during their practical education in PMHN care facilities. Stakeholders in PMHN education including nursing teachers, preceptors, practicing nurses and nursing administrators should utilized the findings of this review in order to identify students' stressors and coping strategies, facilitate their PMHN practical education, and establish successful PMHN clinical teaching methods. Besides, this review contributes to the current literature by updating the researchers in PMHN field about the existing body of knowledge in this area and providing recommendations for future research. Establishing a standardized tool to measure PMHN clinical stress, exploring the eustress aspects of PMHN clinical experience, and investigating the educators' perception about clinical stress are highly recommended areas in forthcoming studies.

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