

Analysis of Stress Coping Strategies among Diploma Nursing Students in Ghana

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Abstract The present study examined stress coping strategies adopted by nursing students in nursing training colleges in Tamale, Ghana. It also examined differences in coping methods based on course type, gender and marital status. A total of 273 State Registered Nursing, Community Health Nursing, and Midwifery students were selected using the stratified random sampling strategy and were made to complete self administered questionnaires on stress coping strategies they utilised to cope with stress. ANOVA and independent sample t-test results indicated that students mainly used cognitive coping methods, followed by both Behavioural and Spiritual, Social and Avoidance ones. With regards to course type, there was a significant difference in the Behavioural coping method with mean scores for Community Health Nursing (CHN) students differing significantly from those of Midwifery students. For the other coping methods (Cognitive, Spiritual, Social, Avoidance) and overall coping, there was no significant difference. There was also no significant difference in the levels of the various coping strategies and overall coping among male and female students. Finally, respondents who were separated, divorced or widowed reported using significantly more Spiritual coping methods as compared to Single and Married respondents although there was no significant differences in Behavioural, Cognitive, Social and Avoidance methods as well as overall coping among the respondents with regards to marital status. Implications of the findings were discussed.

Keywords Stress, Coping strategies, Nursing students, Avoidance coping, Behavioral coping, Cognitive coping

1. Introduction

Coping with stress has been defined in various ways. However, one of the widely accepted one is that of Lazarus and Folkman (1984). According to Lazarus and Folkman (1984) coping is the regular alteration of cognitive and behavioural efforts to deal with or manage external and internal demands that are perceived by the individual as either taxing or exceeding his or her resources. Citing O'Driscoll et al., 1996, Robotham (2008) defined coping as "how an individual seeks to: eliminate or reduce stressors in their environment, alter their appraisal of the potential harmfulness of these stressors, or minimize the extent of strain that they will experience as a result of these stressors" (p. 741). Thus coping refers to efforts to control, reduce or learn to tolerate the threats that lead to stress. Evidence suggest that young people make use of different coping strategies. Some of these are healthy and some are unhealthy (Clegg, 2009). Seifert-Krenke (1993) identified three main methods of coping with stress including active coping, internal coping and withdrawal. Other methods of coping

that has been identified among various samples include planning, suppression of competing activities, restraint coping, seeking social support, positive reinterpretation and growth, acceptance, turning to religion, denial, behavioural disengagement, mental disengagement and alcohol-drug disengagement (Carver, Scheier, & Weintraub, 1989). Clegg (2009) in a literature review identified various stress coping strategies including problem – focused coping, social support, seeking counseling and avoidance of self medication. Stress management strategies also include reinforcing positive esteem, avoiding unnecessary competition, regular physical exercise, proper time management, practicing relaxation techniques and recognizing and accepting one's limits.

A number of empirical studies have been done on stress and coping strategies students in general adopt to deal with stress. For example, as part of their study on stress sources and coping behaviours of second year undergraduate nursing students beginning their clinical practice in a Jordanian university, Shaban, Khater and Akhu-Zaheya (2012) found that the most common coping strategy used by students in the Jordan University of Science and Technology (JUST) and Al al-Bayt university (AABU) was problem-solving behaviour (e.g. "to adopt different strategies to solve problems") followed by staying optimistic (e.g. "to keep an optimistic and positive attitude in dealing with everything in life") and

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use of diversionary (transference) strategies (e.g. "to feast and take a long sleep") and finally avoidance methods (e.g. "to avoid difficulties during clinical practice"). With the demographics characteristics, there was no significant difference between male and female with regards to coping methods used.

Another study by Wolf, Stidham and Ross (2015) on predictors of stress and coping strategies of US undergraduate nursing students in two Midwestern universities using the embedded mixed method revealed that nursing students used "positive thinking" and "social support" as stress coping strategies. The study revealed that students often engaged in positive thinking stating that they often "stay focused", "try to adapt and not worry", "know that they can do it and do it well" among other things. Evans and Kelly (2004) in a study of stress and coping among Diploma student nurses in Ireland also found that the most commonly used coping strategies include talking to relatives, peers, keep thinking they want to carry on and trying to stay out of trouble. According to the researchers, students mainly used emotion - focused coping as compared to problem - focused one and this probably explained why they were emotionally exhausted and pressured since problem-focused coping have been found to be associated with lower distress and fewer sources of stress (Jones & Johnson, 1997). Problem focused coping refers to coping directed towards reducing a threat whereas emotion focused coping is when efforts are directed towards decreasing negative emotions (Evans & Kelly, 2004).

Seyefatemi, Tafresh and Hagani (2007) identified coping strategies in 12 areas among the undergraduate nursing students they studied at the Iran Faculty of Nursing and Midwifery. These Strategies are used in varying degrees by the students in dealing with stress. The strategies include the Family problem solving strategies (e.g. "trying to reason with parents and compromise" (73%), Self-reliance strategy (e.g. "trying to make their own decisions" (62%), Social support strategies (e.g. "trying to help other people solve their problems" (56.3%), Spiritual strategy (e.g. "praying" (65.8%), Seeking diversions strategy (e.g. "listening to music" (57.7%) and Relaxation strategy (e.g. "day dreaming" (52.5%) which are used "Often or Always". The other strategies which are "Seldom or Never" used include the Avoiding strategies (e.g. "smoking" (93.7%), Ventilating strategies (e.g. "saying mean things to people" and "swearing" (85.8%), Professional support strategies (e.g. "getting professional counseling" (74.6%) and Humorous strategy ("joking and keeping a sense of humor" (51.9%). Atindanbila and Abasimi (2011) as part of their study on depression among undergraduate students in the University of Ghana also reported five categories of coping strategies that students use. They include cognitive, social, spiritual, physical and medical strategies. According to them, the most commonly used method was the cognitive strategy followed by both social and spiritual methods. The third coping method was the physical one and the fourth was the medical. They noted that the cognitive method reduced

stress by only 4%. The researchers did not find any significant difference in total coping with regards to gender and marital status.

From the forgoing studies and the stress literature in general, it is clear that there are lack of studies on stress coping strategies of nursing students in Ghana, thus making the current study in the Ghanaian context relevant. The findings of the present study would therefore add to the growing literature on coping among students in general and more specifically on nursing students in Ghana and beyond.

Based on the previous studies reviewed above and other studies not reviewed here, coping strategies can be classified into five main ones and that is the focused of the present study. The five coping strategies include Cognitive, Behavioural, Spiritual, Social and Avoidance ones. Cognitive coping refers to the use of mental or appraisal strategies such as thinking about ways of overcoming problems to deal with stress. Behavioural coping refers to behavioural strategies such as relaxation exercises (meditation, breathing exercise) that are used while Spiritual or religious coping refers to relying on the supreme being or using spiritual means such as seeking help from religious leaders to cope. Social coping refers to reliance on social activities such as seeking help from friends and family to manage stress. Avoidance method has to do with resorting to drugs, smoking or alcohol that enables one to temporarily escape from stressors. By classifying the coping methods into these five categories, the present study examines their use among the nursing students since it is important to find out which methods they mainly use to cope. This will inform counseling and intervention programmes.

There is substantial evidence suggesting that nursing training can be stressful and that undergraduate nursing students experience moderate to high levels of stress (Beck & Srivastava, 1991; Shaban et al., 2012; Seyefatemi et al., 2007). Although most past studies on stress among nursing students have not been conducted in Ghana, it could be argued that nursing students in Ghana also experience high levels of stress. This is because evidence suggest that nursing students in most countries share much in common. Even though not many studies have examined stress and coping among nursing students both at the training colleges and the universities in Ghana, the few past studies conducted among students in general revealed that undergraduate students in Ghanaian universities experience high levels of stress. In Ghana, examples of studies conducted on stress and coping among students in general are those of Atindanbila and Banyem (2011) and Esia-Donkoh, Yelkperri and Kobina Esia-Donkoh (2011). All these studies report varying degrees of stress among undergraduate students. Abasimi, Atindanbila, Mahama and Gai (in press) is among the few studies conducted among nursing students in the nursing training colleges. This study found that various categories of nurses at the Tamale nursing training and Tamale Community nursing training colleges in Ghana experience severe levels of stress and that they experience more personal stressors than academic and social ones.

Evidence generally show that stress is an unavoidable part of students and for that matter nursing students' lives. It is therefore the ability of students to cope that can help them adjust and achieve academic and personal success. The coping strategies nursing students adapt are therefore important in their adjustment process and is thus worthy of examination. As noted earlier, little research has been conducted on stress and coping among nursing students at the nursing training colleges not only in Ghana but globally. Most past studies have either been conducted among undergraduate nursing students in the universities or among practicing nurses. Although the study of Abasimi *et al.* (in press) examined stress among nursing students offering General nursing, Community Health Nursing and Midwifery courses at the nursing training colleges in Tamale, Ghana, the study did not report the coping strategies used by the students to deal with the stressors they encounter even though the researchers found severe levels of stress among them. This means that we are not well informed of the coping strategies such students use to cope with stress.

The current study therefore examined the coping strategies adopted by the nursing students in those nursing training colleges to deal with stress. The study examined the coping strategies under five main categories including behavioural, cognitive, social, spiritual and avoidance coping methods.

This study is guided by the following objectives:

1. To determine the coping methods mainly used by nursing students in the nursing training colleges to cope with stress.
2. To examine the differences among coping strategies used with regards to academic discipline (course type).
3. To assess the differences in the coping strategies with regards to the biographical variables of Gender and Marital status.

The present study is important in several ways. Firstly, the findings will help us have a better understanding of the coping strategies diploma nursing students at the nursing training colleges in Ghana use to deal with stress. Secondly, knowledge of the coping strategies used by the students will equip tutors and counsellors with tools for counselling since it will help them know whether or not students adapt good coping strategies and finally, the findings of the present study will help in designing stress intervention programmes to help nursing students cope better hence improving the quality of nurses that are churned out of these training colleges.

Based on the objectives of the study, the following hypotheses are tested.

1. There will be a significant difference in the reported stress coping strategies among the students. The coping strategies include Behavioural, Cognitive,

Spiritual, Social and Avoidance ones.

2. There will be a significant difference in the reported coping strategies with regards to course type/discipline.
3. There will be a significant difference in the reported coping methods among male and female respondents.
4. There will be a significant difference in the reported coping methods with regards to marital status.

2. Methodology

2.1. Sample and Sampling Technique

This study was conducted at the Tamale Nurses Training and Tamale Community Health Nursing Training Colleges. These two colleges are the main public nursing training colleges in Northern Ghana and thus enroll a large number of students from all over the country to study towards the award of either a diploma in General nursing (SRN), Community Health nursing or Midwifery. Specifically, the Tamale Nurses Training College offers General Nursing and Midwifery while the Community Health Nursing college offers Community Health nursing. The presence and closeness of the Tamale Teaching Hospital to these two training colleges makes the clinical training of the nursing students easy since most of the students do their clinical training in this major hospital.

The stratified random sampling technique was used to select a total sample of 273 students from the two training colleges. The stratified random sampling technique that was used ensured that the sample was representative of the various courses offered at the nursing training colleges. Since questionnaires were administered in class and collected back immediately it yielded a response rate of 100%. All questionnaires were appropriately completed and as a result, they were all used for the analysis. Majority of the respondents 221(80.95%) were in the age range of 19-24 followed by the age range of 25-30 which was 43 (15.75%). Female and male respondents were 172(63%) and 101 (37%) respectively. With regards to marital status, 239 (87.5%) were single, 24 (8.79%) were married while only 10 (3.7%) were either separated, divorced or widowed. Majority of students, 153 (56%) offered Community Health Nursing (CHN) while 82 (30%) and 38 (13.9%) offered General/ State Registered Nursing (SRN) and Midwifery respectively.

The cross-sectional survey method was used to gather data since it is the most appropriate technique in assessing the stress and coping experienced by the students. It should be noted that this study was part of a larger study on stress and coping. The findings for the levels and types of stress has been reported elsewhere.

Table 1. Summary of means and standard deviations of the stress coping scores

	Behavioural	Cognitive	Spiritual	Social	Avoidance	TOTAL COPING
Total Nursing Students (N=273)	9.95 (3.73)	15.73 (5.46)	9.69 (4.02)	7.96 (3.49)	6.45 (3.50)	
SRN (n=82)	9.61 (3.32)	15.51 (5.10)	10.17 (3.98)	7.96 (3.27)	6.56 (3.68)	49.82 (13.90)
CHN (n=153)	10.50 (3.79)	15.74 (5.46)	9.31 (3.99)	8.11 (3.67)	6.55 (3.54)	50.21 (14.89)
MID (n=38)	8.50 (3.97)	16.16 (6.29)	10.18 (4.19)	7.96 (3.49)	5.82 (2.95)	48.03 (15.47)
Male (n=101)	9.99 (3.55)	16.08 (5.19)	9.60 (3.91)	8.29 (3.42)	6.62 (3.75)	50.58 (14.11)
Female (n=172)	9.93 (3.85)	15.52 (5.62)	9.74 (4.09)	7.77 (3.53)	6.35 (3.36)	49.32 (14.98)
Single (n = 239)	10.09 (3.72)	15.65 (5.35)	9.64 (4.00)	7.90 (3.51)	6.31 (3.32)	49.59 (14.39)
Married (n=24)	9.29 (3.94)	15.58 (6.64)	8.92 (4.16)	7.76 (3.68)	7.00 (4.17)	49.75 (17.12)
Other (n=10)	8.00 (3.12)	18.33 (4.66)	13.11 (2.67)	9.78 (2.05)	8.67 (3.50)	57.89 (13.85)

Note - SRN: State/ General Registered nursing; CHN: Community Health nursing; MID: Midwifery

2.2. Instrument and Procedure

Data collection was done using self constructed survey questionnaire. The questionnaire was self-constructed based on the review of past studies on stress and coping among students. Content validity was ensured through peer review and Cronbach alpha reliability was initially determined by conducting pilot study. As stated earlier, the results being reported here was part of a larger study that examined stress and coping. The findings on the types and levels of stress has been reported elsewhere. The Questionnaire on the coping aspect of the study consisted 28 items in addition to the demographic variables of the study. The demographic section sought for information such as age, gender, marital status, course type (academic discipline) and year of study. The items on the coping strategies consisted of 28 structured items on various stress coping strategies among students. These coping methods are classified into five categories based on previous studies. The items consist of 6 items representing Behavioural coping (e.g. relaxation exercise - meditation, breathing exercise), 7 items representing Cognitive coping (e.g. think about ways of overcoming problems), 4 items representing Spiritual (e.g. seek help from religious leaders), 4 items representing Social (e.g. seek help from friends), and 7 items representing Avoidance (e.g. drink alcohol) methods of coping. Response categories range from applied to me less = 1 to applied to me more = 5 with higher scores indicating greater level of coping. Participants indicated how much the statement applied to them over the past five months including the moment they were responding to the items. For the present sample, the scale has good Cronbach alpha reliability of .86 with reliabilities ranging from .65 to .77 for the subscales. The Cronbach alpha reliabilities were .65, .68, .71, .72 and .77 for Avoidance, Behavioural, Social, Cognitive and Spiritual subscales respectively. Apart from the Avoidance and behavioural subscales, all the other subscales are well above the recommended level of reliability (Nunanly & Bernstein, 1994).

The scale was first pretested on a group of 20 nursing students who did not form part of the actual sample. This

enabled the researchers to assess the suitability of the tool for use. The pilot study demonstrated that the items were adequate for use and was thus used as such.

Permission for the conduct of the study was sought from the principals of the two training colleges. Two teachers, one from each college then assisted the researchers with the selection and data collection process. Students who were selected were then made to complete the questionnaire some minutes before their classes began for immediate collection by researchers and assistants. Respondents were encouraged to respond to items as sincerely as possible and that confidentiality was assured. It took respondents about twenty minutes to answer the questionnaire.

3. Results

The results were analyzed using SPSS version 17 based on the hypotheses of the study. Details of the analysis are presented below.

In according with the hypothesis, in table 1 descriptive statistic were reported. The coping strategies include Behavioural, Cognitive, Spiritual, Social and Avoidance ones and, in table 1, means and standard deviations of the stress coping scores were synthesized.

Summary of Post hoc Results by ranking

1st = Cognitive; 2nd = Behavioural and Spiritual; 3rd = Social; 4th = Avoidance

The first hypothesis stated that there will be a significant difference in the reported stress coping methods among the students. A One - Way Repeated Measures ANOVA was used to test this hypothesis. There was a significant difference in the reported levels of the various coping strategies, Wilks' $\lambda = .239$, [$F(4, 269) = 2.14$, $P < .0005$; $\eta^2 = .761$]. The eta squared value of .761 implies that the difference was large. Post hoc analysis (using paired samples t-test) revealed that with the exception of Behavioural and Spiritual coping which did not differ significantly from each other [$t(272) = .940$, $P = .348$], all other pairs differed significantly from each other at the .005 level of significance.

Specifically, for Behavioural and Cognitive coping [$t(272) = -17.646, P < .005$], for Behavioural and Social [$t(272) = 7.556, P < .005$], for Behavioural and Avoidance [$t(272) = 13.460, P < .005$], for cognitive and Spiritual [$t(272) = 21.758, P < .005$], for cognitive and Social [$t(272) = 26.470, P < .005$], for Cognitive and Avoidance [$t(272) = 27.618, P < .005$], for Spiritual and Social [$t(272) = 9.268, P < .005$], for Spiritual and Avoidance [$t(272) = 11.870, P < .005$], and for Social and Avoidance [$t(272) = 6.552, P < .005$]. Post hoc analysis included ranking of the coping methods using the mean values. The highest coping method was Cognitive, followed by both Behavioural and Spiritual, Social and finally Avoidance in that order as shown under Table 1. This implies that students used more cognitive coping methods followed by Behavioral and spiritual ones which came second. The third coping method was the Social one and the last was that of Avoidance.

The second hypothesis stated that there will be a significant difference in the coping methods used with regards to Course type. This hypothesis is concerned with whether the reported coping methods would vary among the respondents with regards to the course they offer: State/General Registered nursing (SRN); Community Health nursing (CHN) and Midwifery (MID). A One –Way ANOVA was used to compare the differences in the mean coping scores with regards to course type. The findings reveal that there was a significant difference in the Behavioural coping method with regards to course type or academic discipline (i.e. SRN, CHN, MID). There was significant difference for the three course groups [$F(2, 270) = 4.988; p = .007$]. No statistical differences between groups were found in Cognitive [$F(2, 270) = .181; p = .83$], in spiritual [$F(2, 270) = .687; p = .504$], in Avoidance [$F(2, 270) = .724; p = .486$] coping strategies. In general course type did not represent a relevant variable; no statistical differences was found in total coping scores [$F(2, 270) = .337; p = .71$]. Post hoc comparisons (using Turkey HSD) revealed that the mean scores (Behavioural coping) for Community Health Nursing (CHN) students ($M = 10.50, SD = 3.79$) differed significantly from those offering Midwifery ($M = 8.50, SD = 3.97$), [$t(271) = 1.99; p = .008$]. Mean behavioural coping scores of CHN students however did not differ from SRN students. Means scores for Midwifery and SRN students were also similar [$t(271) = 1.11; p = .275$].

The third hypothesis to be tested stated that there will be a significant difference in the level of coping among male and female students. This hypothesis is concerned with whether the reported levels of coping vary among the respondents with regards to their gender. The Independent Sample t- test was used to compare the differences in the mean scores for the various coping methods and the overall coping among male and female respondents. There were no statistically significant differences in the reported levels of the various coping strategies among male and female students [Behavioural: $t(271) = .128; p = .899$; Cognitive: $t(271) = .812; p = .418$; Spiritual: $t(271) = -.278; p = .781$; Social: $t(271) = 1.175; p = .241$; Avoidance: $t(271) = .625; p = .532$].

There was also no significant difference in overall coping among them [$t(271) = .688; p = .492$].

The final hypothesis to be tested stated that there will be a significant difference in the coping methods reported with regards to marital status. This hypothesis is concerned with whether the coping methods used vary among the respondents with regards to their marital status. A One –Way ANOVA was used to compare the differences in the mean scores of coping among the three groups, that is Single, Married and “Other” respondents. The “Other” respondents represent those who are separated, divorced or widowed. Results show that there was a significant difference among the three groups, [$F(270) = 3.793; p = .024$]. The post hoc analysis (using Turkey HSD) showed that “Other” respondents (i.e. respondents who are separated, divorced or widowed) reported using significantly more Spiritual coping method ($M = 13.11, SD = 2.67$), as compared to Single ($M = 9.64, SD = 4.00$) [$t(271) = 1.351; p = .029$] and Married respondents ($M = 8.92, SD = 4.16$) [$t(271) = 1.556; p = .02$]. There was no significant difference in the use of Spiritual coping between single and married respondents [$t(271) = .725; p = .672$]. There was also no significant differences in Behavioural [$F(270) = 1.783; p = .17$], Cognitive [$F(270) = 1.061; p = .347$], Social [$F(270) = 1.263; p = .285$] and Avoidance [$F(270) = 2.305; p = .102$] methods as well as overall coping among the respondents with regards to marital status [$F(272) = 1.464; p = .519$].

4. Discussion and Conclusions

Since exposure to stressors have become an inevitable part of the nursing student’s experience as has been reported by several studies, their ability to cope well can contribute significantly to their academic and personal success. Knowledge of the coping strategies nursing students in the nursing training colleges utilise to cope with stress can be helpful in counselling and the organisation of stress intervention programmes. This study, as part of a larger one, therefore examined the strategies used by nursing students of the two nursing training colleges in Tamale, Ghana to cope with the stressors they encounter. Specifically, the study examined the differences in the coping methods used by students so as to rank them and determine those mainly used. It also assessed the differences in the coping methods with regards to course type and the demographic variables of gender and marital status. The findings are generally consistent with past findings although some findings constitute baseline ones. The findings are discussed in the light of the objectives and hypotheses of the study as follows.

The first objective of the study was to examine the coping methods mainly used by students to cope with stress. Based on this objective, it was hypothesized that there will be a significant difference in the reported stress coping methods among the students to deal with stress. The findings reveal that there was a significant difference in the reported levels of the various coping methods. The highest coping methods adopted by students was Cognitive, followed by both

Behavioural and Spiritual, Social and Avoidance in that order. The pattern of coping is similar to that of Atindanbila and Abasimi (2011) who found that undergraduate students in the University of Ghana mainly used the cognitive method followed by social and spiritual ones. The third was found to be physical method and the least used was medical methods. Kyriacou (1980) also found that teachers mainly used the cognitive coping strategy. The fact that students in the Tamale training colleges reported severe stress (Abasimi et al., in press) despite mainly using the cognitive coping method may imply that the cognitive coping strategy is either ineffective, inadequate or they are overwhelmed by the stressors. The inadequacy of the cognitive coping strategy is confirmed by the fact that Atindanbila and Abasimi (2011) noted that the cognitive coping strategy only reduced stress by 4%. The results also seem to suggest that there are similarities in the coping patterns of nursing students in the training colleges and undergraduates students at the universities although nursing students generally reported more stress.

The second objective was to examine the differences among coping strategies with regards to academic discipline (course type). The hypothesis based on this objective stated that there will be a significant difference in the reported coping methods with regards to course type/ discipline. The results indicate that there was a significant difference in the Behavioural coping method with regards to course type. Specifically, the mean scores for Community Health Nursing (CHN) students differed significantly from those offering Midwifery with CHN students reporting higher scores. CHN students however did not differ from SRN students. There was also no significant difference between Midwifery and SRN students with regards to behavioural coping. For the other coping methods (Cognitive, Spiritual, Social, Avoidance) there was no significant difference in coping methods with regards to course type. There was also no significant difference in overall coping with regards to course type. This findings seem to be new since the researchers did not find any previous study that examined coping with regards to course type among nursing students. The findings therefore constitute baseline information for future studies.

The third objective was to assess the differences in the coping methods with regards to the biographical variables of Gender and Marital status. Two hypotheses were tested based on this objective. The first stated that there will be a significant difference in the reported coping methods among male and female respondents. The findings show that there was no significant difference in the levels of the various coping methods among male and female respondents. There was also no significant difference in overall coping among them. This finding is similar to that of Shaban et al. (2012) who found no significant difference among males and females respondents with regards to the coping strategies of problem-solving, staying optimistic, use of diversionary strategies and avoidance methods in Jordan. Atindanbila and Abasimi (2011) also found no gender difference in the use of

the five coping strategies (cognitive, social, spiritual, physical and medical) they examined among undergraduates students in the University of Ghana. The second hypothesis based on the above objective was that there will be a significant difference in the reported coping methods with regards to marital status. It was found that "Other" respondents (i.e. respondents who are separated, divorced or widowed) reported using more Spiritual coping methods as compared to Single and Married respondents. There was however no significant differences in Behavioural, Cognitive, Social and Avoidance methods as well as overall coping among the respondents with regards to marital status. This finding is generally consistent with Atindanbila and Abasimi (2011) who also found no significant difference in total coping with regards to marital status. The finding that respondents who are separated, divorced or widowed used more spiritual coping compared to single and married ones is a new finding and thus constitute baseline information for future studies.

In concluding, as part of a larger study examining the stress and coping strategies among nursing students, the purpose of this study was to report the stress coping methods utilised by the nursing students at the two public nursing training colleges in Tamale, Ghana. The study examined the differences in the utilisation of the various coping methods so as to determine the most utilised ones. It also assessed the differences in the coping strategies with regards to course type and the demographic variables of gender and marital status. The findings show that students mainly used the cognitive coping method, followed by both Behavioural and Spiritual, Social and Avoidance ones. Regarding coping and course type, there was a significant difference in the Behavioural coping method with mean scores for Community Health Nursing (CHN) students differing significantly from those of Midwifery students. For the other coping methods (Cognitive, Spiritual, Social, Avoidance) and overall coping, there was no significant difference. There was also no significant difference in the reported levels of the various coping methods and overall coping among male and female students. Finally, respondents who are separated, divorced or widowed reported using significantly more Spiritual coping methods as compared to single and married ones although there was no significant differences in Behavioural, Cognitive, Social and Avoidance methods as well as overall coping among the respondents with regards to marital status.

Based on the findings, it was recommended that there is the need for the authorities of the nursing training colleges to implement and intensify stress management programmes so as to help students adopt more effective coping strategies to reduce stress. This is because despite the fact that the students were found to mainly use coping strategies such as cognitive and behavioural strategies, an earlier finding (Abasimi et al., in press) revealed severe levels of stress among the students of the training colleges studied. It was also recommended that more research on the subject using other nursing samples across the country as well as

qualitative and longitudinal studies are needed.

An important finding of the present study is that the nursing students mainly used the cognitive coping method followed by the behavioural and spiritual ones. However, the fact that the students still report severe levels of stress as was recently found by Abasimi *et al.* (in press) seem to imply that the reliance on the cognitive method is not adequate and that the authorities of these colleges need to do more to help students cope better. It is therefore recommended that the nursing training colleges organise stress management programmes for the students to help them learn effective ways of managing and coping better with stress. It should be noted that stress management strategies are different from coping strategies. Students might be reporting severe stress despite the use of the various coping strategies because they lack stress management strategies such as time management skills and thus need to be taught how to do that. It could also be explained by the fact that there are inadequate counseling services in these colleges to help guide students when they are faced with difficulties or help them adopt effective coping strategies. The researchers' observation was that unlike the universities in Ghana where there are counseling and placement centers to help students with various difficulties, the nursing training colleges do not have these centers.

One limitation of this study is that the Cronbach alpha reliabilities for the Behavioural (.68) and Avoidance (.65) subscales did not reach the recommended level and need to be examined by future researchers. This limitation might be because the items in the scale were few although the pilot study indicated that they were adequate. Future researchers intending to use them therefore need to take a second look at them. Future researchers could also replicate the study by using other nursing samples across the country in addition to adapting qualitative and longitudinal methodologies.

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