NURSING STRESSORS, PROFESSIONAL QUALITY OF LIFE AND MEANING: CORRELATES AND QUALITATIVE REFLECTIONS

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ABSTRACT
Nursing is a particularly stressful career. Most of the research on stressors experienced in nursing has focused on stress levels among registered nurses, with scant attention being given to nursing students, who are also exposed to substantial stressors. This study investigated stressors, professional quality of life (compassion fatigue, burnout and compassion satisfaction) and meaning among nursing students. One hundred and forty four participants ($M_{age} = 21.59, SD = 3.76$, female = 86.81%) completed surveys on professional quality of life and meaning. A subgroup of 16 participants ($M_{age} = 20.31, SD = 1.49$, female = 80%) provided qualitative data (nominal group technique, a group interview and narrative sketches). Quantitative data indicated that participants were at high risk for the development of compassion fatigue and burnout. The qualitative findings highlighted sources of stressors that were not identified by means of the quantitative instruments, for example academic workload and financial challenges. The value of reflective approaches to research with nursing students is highlighted.

Keywords: burnout, compassion fatigue, compassion satisfaction, meaning, mixed methods, nominal group technique, nursing students, professional quality of life, stressors in nursing.

Stress is part and parcel of nursing practice (Boyle, 2011; Nel, Jonker & Rabie, 2013). Amongst others, nurses are confronted with stressors such as death and dying, conducting painful procedures on patients and extended working hours (Potter, Desielsds, Divanbeigi, Berger, Cipriani, Norris & Olsen, 2010). If left unmanaged, the aforementioned stressors could have deleterious effects, such as compassion fatigue and burnout (Baranowsky, 2012). Notwithstanding stressors and deleterious effects,
nurses can also experience their work as satisfying (Potter et al., 2010). A high sense of compassion satisfaction, which can be described as a positive effect, could serve as a buffer against deleterious effects such as compassion fatigue and burnout (Elkonin & Van der Vyver, 2011; Stamm, 2005). Koen, Van Eeden and Wissing (2011) add that nurses also require a sense of meaning in life to function optimally within their work environment. Research suggests that a sense of meaning may also function as a protective factor against the deleterious effects of stress (Makola, 2013; Steger, 2009).

Even though a substantial body of research has focused on registered nurses (Boyle, 2011; Nel et al., 2013; Potter et al., 2010), recent arguments have also highlighted the importance of studying deleterious and positive effects among nursing students (Mason & Nel, 2012; Watkins, Roos & Van der Walt, 2011). Research has also revealed that younger employees tend to experience higher levels of secondary stress when compared to older staff (Haley, Mostert & Els, 2013).

Subsequently, nursing students who may typically be relatively young could experience high levels of secondary stress (Janse van Rensburg, Poggenpoel & Myburgh, 2012; Mason & Nel, 2012). Given the strategic priority that nurses, and in this case nursing students, play within the South African healthcare context, studies that investigate deleterious and positive effects among nursing students are needed (Minnaar & Selebi, 2009; Watkins et al., 2011).

This article reports on a mixed methods study that investigated the following two aspects: (1) the relationship between the stressors, deleterious and positive effects among nursing students, and (2) nursing students’ qualitative perspectives on deleterious and positive effects. It is hoped that this article will contribute to the growing body of literature on the wellbeing of nursing students.

In the next section the literature review is presented. Next, the goal of the study and the research questions are outlined. Then, the research methodology is discussed in terms of the research design, participants and setting, instrumentation, procedure, data analyses and ethics. These sections are followed by a report on both the quantitative and qualitative findings of the study. Lastly, the main findings are summarised, limitations are pointed out and areas for further research are discussed.

LITERATURE REVIEW: STRESSORS IN THE NURSING ENVIRONMENT

In this review of the literature theoretical aspects relevant to the empirical study are discussed. More specifically, the following aspects are covered: stressors in nursing, the concepts of compassion fatigue, burnout, compassion satisfaction and meaning.

Major sources of stress within nursing environments include high workload, death and dying among patients and feelings of inadequacy in terms of addressing the needs of patients and their families (Gray-Toft & Anderson, 1981). McVicar (2003) adds that inadequate staffing and time pressure, relationships with other clinical staff and poor
remuneration may serve as additional sources of stress. Nursing students encounter added pressures such as developing professional skills, a challenging academic workload and practical training (Matlakala, 2003; Por, Barriball, Fitzpatrick & Roberts, 2011). An inability to address the stressors of nursing practice effectively could give rise to compassion fatigue and burnout (Potter et al., 2010).

Compassion fatigue is defined as a state of tension and preoccupation with the traumatised patients by re-experiencing the traumatic events, avoidance/numbing and persistent arousal associated with the patient (Baranowsky, 2012). Burnout refers to a state of physical, emotional and mental exhaustion that develops in response to a depletion of coping efforts in the face of ongoing demand characteristics (Haley, Mostert & Els, 2013). Prior research has indicated that nurses could experience compassion satisfaction and meaning in spite of the presence of compassion fatigue and burnout (Elkonin & Van der Vyver, 2011; Potter et al., 2010).

Compassion satisfaction refers to levels of fulfilment, pleasure and enjoyment that helping professionals obtain from their occupations (Stamm, 2005). In addition to compassion satisfaction, helping professionals could also derive a sense of meaning from their work (Baranowsky, 2012). The concept of meaning refers to the capacity to recognise and/or construct order, coherence and purpose in life, in addition to setting, pursuing and attaining goals, which could result in a sense of fulfilment (Makola, 2013; Steger, 2009).

Goal of the Study

This mixed methods study investigated the relationships between stressors, compassion fatigue, burnout, compassion satisfaction and meaning among a sample of nursing students. Qualitative data were collected in order to develop a more holistic understanding of the quantitative data. This study was guided by the following two research questions:

- Primary research question: What are the relationships between stressors, compassion fatigue, burnout, compassion satisfaction and meaning among nursing students?
- Secondary research question: What is nursing students’ experience of stressors, deleterious and positive effects during their training?

METHOD

In this section the methodology that was adopted to conduct the empirical study is discussed. Both quantitative and qualitative data were collected, analysed and integrated. Subsequently, a mixed methods research design was adopted.

Research Design
This study adopted a sequential explanatory mixed methods research design. According to Creswell (2014), a sequential explanatory mixed methods research design should be adopted when (1) the primary aim of the study is quantitative in nature, and (2) qualitative data will be collected in order to develop a better understanding of the quantitative results. Since the primary aim of this study was to investigate the quantitative relationships between stressors, compassion fatigue, burnout, compassion satisfaction and meaning among nursing students, and the secondary aim was to draw on qualitative data to develop a better understanding of quantitative results, a sequential explanatory mixed methods research design was regarded as appropriate.

**Participants and Setting**

A purposeful sample consisting of 144 nursing students ($N = 144$, $M_{\text{age}} = 21.59$, $SD = 3.76$, 86.81% female) participated in the quantitative phase of the study. A total of 16 participants ($N = 16$, $M_{\text{age}} = 20.31$, $SD = 1.49$, 80% female) were included in the qualitative data collection sample. The criteria for inclusion in the study were that all participants had to be 18 years of age or older and enrolled for nursing studies at a specific South African university.

**Instruments**

Participants completed the fourth revision of the Professional Quality of Life (ProQOL R-IV) Scale (Stamm, 2005), the Life Purpose Questionnaire (LPQ) (Hutzell, 1989), and the Nursing Stress Scale (NSS) (Gray-Toft & Anderson, 1981). A subsample provided qualitative data by means of the nominal group technique, a group interview and narrative sketches.

**The Professional Quality of Life Scale (ProQOL R-IV).** Construct validation revealed that the ProQOL R-IV serves as an empirical measure for the distinct concepts of compassion fatigue ($\alpha = 0.80$), burnout ($\alpha = 0.72$) and compassion satisfaction ($\alpha = 0.87$) (Stamm, 2005). Each of the aforementioned constructs is measured via a 10-item scale. Participants are requested to provide response ratings on a six-point Likert-type scale, ranging from 0 that denotes never, to 5 indicating very often. The following guidelines for interpretation are provided: (1) Compassion fatigue ($M = 13$, $< 8 =$ low risk, $8–17 =$ moderate risk, $> 17 =$ high risk), (2) burnout ($M = 22$, $< 17 =$ low risk, $17–28 =$ moderate risk, $> 28 =$ high risk), and compassion satisfaction ($M = 37$, $< 32 =$ low potential, $32–41 =$ moderate potential, $> 41 =$ high potential).

**The Life Purpose Questionnaire (LPQ).** The LPQ is a 20-item measure in which participants are requested to indicate whether they agree or disagree with the statements (example of an item: I have discovered many reasons why I was born). Hutzell (1989) provides the following guidelines for interpretation: 0–11 = no sense of meaning; 12–16 = uncertain definition; and 17–20 = definite sense of meaning. Internal consistency reliabilities of .73–.84 have been reported (Hutzell, 1989; Schulenberg, 2004).
The Nursing Stress Scale (NSS). The NSS consists of 34 items and serves as an empirical measure to assess nurses’ perceived stress levels according to seven sources of stress, namely (1) death and dying, (2) conflict with medical doctors, (3) feelings of inadequacy in dealing with the emotional needs of patients and their families, (4) lack of staff support, (5) conflict with other nurses, (6) workload, and (7) uncertainty regarding treatment (Gray-Toft & Anderson, 1981). Reporting on a four-point Likert-type scale (0 = never to 3 = very frequently), participants indicate how often they have experienced the listed items as stressful (e.g. For each statement below indicate how often in your present unit you have found the situation to be stressful – ‘The death of a patient with whom you developed a close relationship’, and ‘Feeling inadequately prepared to help with the emotional needs of a patient’). Prior statistical analysis revealed internal consistency coefficients ranging from .79–.89 (Gray-Toft & Anderson, 1981).

Qualitative data collection methods. Qualitative data were collected by means of three methods, namely the nominal group technique, a group interview and narrative sketches. The nominal group technique, derived from an action research perspective, is a method for collecting qualitative data from a group of people in response to a focal question (Zuber-Skerritt, 2011) (see Dick, 1991 for a comprehensive discussion on the nominal group technique). The focal question presented to participants was: For you as a nursing student, what are the most significant stressors that you encounter?

Following the nominal group technique, the sample participated in a group interview where the two guiding questions were: (1) What are your thoughts, feelings and perspectives about the discussion (nominal group technique process) we just had? (2) What can be done to best support nursing students with the stressful challenges that they encounter? Additional questions were asked to clarify participants’ intended meanings. The group interview was audio-recorded and transcribed verbatim. All participants were requested to indicate their participant number prior to providing input.

Subsequent to the group interview, all participants were requested to write a narrative sketch. Giorgi (1985) describes narrative sketches as documents written by participants to depict their stories and perspectives about the theme in question. The instructions to the narrative sketch read as follows: For you personally, what were the three most important aspects that arose during today’s discussion?

Procedure

Participants completed the research questionnaire package during pre-arranged face-to-face meetings with the researcher. All participants were requested, subject to their consent, to complete the research questionnaire package. Completion time was approximately 30 minutes. Participants were requested to seal their completed research questionnaires in an envelope and place them in a box that was provided by the researcher.

Participants who agreed to provide qualitative data were contacted and pertinent arrangements (date and time) were made. It took approximately 45 minutes to complete
the nominal group technique procedure and a further 45 minutes for the group interview. Completion time for the narrative sketches was approximately 15 minutes.

Data Analyses

Descriptive statistics and the Pearson product-moment correlation coefficient, managed by means of SPSS version 22, were used to analyse and report on the quantitative data. Thematic analysis, consisting of the following five steps was used to analyse the qualitative data: (1) familiarisation, (2) inducing themes, (3) coding, (4) elaboration, and (5) interpretation and checking. The software programme Atlas.ti, version 7 was used to manage the qualitative data analysis process. Trustworthiness of the qualitative analysis was ensured through triangulation, prolonged exposure, keeping a reflexive journal, participant observation and using verbatim quotes to substantiate findings (Creswell, 2014). The referencing system used after verbatim quotes indicates participant number, data source, gender and age in parenthesis.

Research Ethics

The Research Ethics Committee of the university where the sample was drawn and the Department of Psychology at the University of South Africa granted permission to conduct the study. Quantitative data were collected anonymously. All participants who provided qualitative data were requested to provide written informed consent. The research was conducted according to accepted ethical norms (Creswell, 2014).

RESULTS AND DISCUSSION

The results from the empirical study are discussed in the following sections. First, the quantitative results are presented, and then the qualitative findings are discussed. Lastly, the quantitative results and qualitative findings are integrated.

Quantitative Results

The descriptive statistics are indicated in Table 1. The mean score obtained on the compassion fatigue subscale ($M = 21.13$, $SD = 7.79$) can be interpreted as pointing to high risk for the development of compassion fatigue. Participants’ responses on the burnout subscale pointed to moderate risk ($M = 19.32$, $SD = 7.21$), whereas compassion satisfaction indicated high potential for experiencing compassion satisfaction ($M = 42.70$, $SD = 6.10$). This combination – high risk for burnout, moderate risk for burnout and high potential for compassion satisfaction – is consistent with previous research conducted among a sample of nursing students (Mason & Nel, 2012). Cronbach’s alphas were acceptable to good on the aforementioned ProQOL R-IV subscales.
Table 1: Descriptive statistics

<table>
<thead>
<tr>
<th>Scale</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>ProQOL R-IV</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compassion fatigue</td>
<td>144</td>
<td>21.13</td>
<td>7.79</td>
<td>.71</td>
</tr>
<tr>
<td>Burnout</td>
<td>144</td>
<td>19.32</td>
<td>7.21</td>
<td>.67</td>
</tr>
<tr>
<td>Compassion satisfaction</td>
<td></td>
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<tr>
<td>NSS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Death and dying</td>
<td>144</td>
<td>42.70</td>
<td>6.10</td>
<td>.84</td>
</tr>
<tr>
<td>NSS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conflicts: Medical doctors</td>
<td>144</td>
<td>1.46</td>
<td>0.80</td>
<td>.81</td>
</tr>
<tr>
<td>Inadequacy in dealing with patients/family</td>
<td>144</td>
<td>1.33</td>
<td>0.41</td>
<td>.69</td>
</tr>
<tr>
<td>Lack of staff support</td>
<td>144</td>
<td>1.05</td>
<td>0.11</td>
<td>.73</td>
</tr>
<tr>
<td>Conflict with other nurses</td>
<td>144</td>
<td>2.18</td>
<td>1.02</td>
<td>.75</td>
</tr>
<tr>
<td>Workload</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uncertainty regarding treatment</td>
<td>144</td>
<td>1.72</td>
<td>0.50</td>
<td>.76</td>
</tr>
<tr>
<td>LPQ</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meaning</td>
<td>144</td>
<td>14.05</td>
<td>3.72</td>
<td>.78</td>
</tr>
</tbody>
</table>

Note. ProQOL R-IV = Professional Quality of Life Scale (fourth revision)
NSS = Nursing Stress Scale
LPQ = Life Purpose Questionnaire

The most prominent stressor reported on the Nursing Stress Scale was conflict with other nurses ($M = 2.18$, $SD = 1.02$). Research has indicated that social support is a prominent coping strategy among those in the helping professions (Baranowsky, 2012; Nel et al., 2013). Conflict with other nurses could therefore point to a possible absence of an important coping resource, namely social support.

Workload also emerged as a prominent stressor ($M = 1.72$, $SD = 0.50$). After having completed their academic studies, nursing students are expected to engage in practical training (Matlakala, 2003). Thus, nursing students are exposed to a demanding workload. The Cronbach’s alphas on the NSS ranged from acceptable to good (.69–.82).

The LPQ mean score ($M = 14.05$, $SD = 3.72$) points to an uncertain sense of meaning. This finding is consistent with earlier research conducted among South African participants in the 18–25 years of age cohort (Mason, 2013). The internal consistency of the LPQ pointed to an acceptable level (Cronbach’s alpha = .78).

The Pearson product moment correlations are presented in Table 2. Consistent with previous research (Elkonin & Van der Vyver, 2011; Potter et al., 2010), significant
inverse correlations emerged between compassion satisfaction and compassion fatigue ($r = -0.34, p < 0.01$) as well as burnout ($r = -0.64, p < 0.01$). Compassion fatigue and burnout were positively correlated ($r = 0.61, p < 0.01$). This positive correlation suggests that participants who were experiencing greater levels of compassion fatigue were more likely to report higher levels of burnout. Baranowsky (2012) states that the simultaneous occurrence of compassion fatigue and burnout is a warning sign of significant levels of distress.

Statistically significant correlations emerged between workload and all the variables included in the study. Together with the data indicated in Table 1, workload appears to be a prominent stressor among participants.

Death and dying presented with a strong positive correlation with the stressor of conflict with medical doctors ($r = 0.81, p < 0.01$). This strong correlation signifies the stressful nature of nursing work: a high-pressure environment characterised by life and death decisions, as well as seemingly unequal power relationships (Matlakala, 2003; McVicar, 2003; Por et al., 2011).

Meaning was positively associated with compassion satisfaction ($r = 0.58, p < 0.01$) and inversely related with compassion fatigue ($r = -0.51, p < 0.01$), burnout ($r = -0.61, p < 0.01$) and workload ($r = -0.41, p < 0.01$). It could subsequently be hypothesised that meaning may serve as a protective factor against the deleterious effects of secondary stress.

Qualitative Findings

Identification of prominent stressors experienced by participants. Participants identified the following six prominent stressors by means of the nominal group technique: (1) challenges within the nursing profession (specifically: patient care, role conflict and ethical challenges), (2) time management, (3) dealing with cultural diversity, (4) secondary trauma, (5) academic workload, and (6) financial challenges. The identified stressors were discussed during the group interview.

Discussion of prominent stressors experienced by participants. During the group interview participants indicated that they experienced uncertainty about their roles. One participant described the situation as follows:

Patients think that you have all the answers ... still learning ... feel unsure of myself ... what do I say? Am I allowed to help them or not? (Participant #3, group interview, female, 21).

Managing time effectively also emerged as a topical issue amongst the participants. The majority of the participants agreed that time management, notwithstanding a basic understanding of core principles, remains a challenge within the pressurised nursing environment:

I know how to set a timetable ... when running around all the time, I don't even think about a silly timetable ... (Participant #11, group interview, female, 21).
### Table 2: Correlation Matrix

<table>
<thead>
<tr>
<th>Scale</th>
<th>Burnout</th>
<th>Compassion fatigue</th>
<th>Compassion satisfaction</th>
<th>Death and dying</th>
<th>Conflict: Medical doctors</th>
<th>Inadequacy: Dealing with patients/family</th>
<th>Lack of staff support</th>
<th>Conflict: Other nurses</th>
<th>Workload</th>
<th>Uncertainty: Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compassion fatigue</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compassion satisfaction</td>
<td>-.64**</td>
<td></td>
<td>-.34**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Death and dying</td>
<td>.058</td>
<td>-.04</td>
<td>.17*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conflict: Medical doctors</td>
<td>.16</td>
<td>-.06</td>
<td>.069</td>
<td>.81**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inadequacy in dealing with patients/family</td>
<td>.27**</td>
<td>.13</td>
<td>-.096</td>
<td>.43**</td>
<td>.46**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of staff support</td>
<td>.30**</td>
<td>.04</td>
<td>-.173</td>
<td>.40**</td>
<td>.37**</td>
<td>.57**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conflict: Other nurses</td>
<td>.19*</td>
<td>.24**</td>
<td>-.002</td>
<td>.11</td>
<td>.19*</td>
<td>.22**</td>
<td>.12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workload</td>
<td>.36**</td>
<td>.25**</td>
<td>-.24**</td>
<td>.25**</td>
<td>.24**</td>
<td>.48**</td>
<td>.43**</td>
<td>.26**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uncertainty: Treatment</td>
<td>.17*</td>
<td>.022</td>
<td>-.003</td>
<td>.32**</td>
<td>.44**</td>
<td>.19*</td>
<td>.35**</td>
<td>-.18</td>
<td>.26**</td>
<td></td>
</tr>
<tr>
<td>Meaning</td>
<td>-.61**</td>
<td>-.51**</td>
<td>.580*</td>
<td>.052</td>
<td>.021</td>
<td>-.18</td>
<td>-.075</td>
<td>-.19*</td>
<td>-.41**</td>
<td>-.016</td>
</tr>
</tbody>
</table>

Note. *p < 0.05 (two-tailed)   **p < 0.01 (two-tailed)
Time management was also related to the fifth stressor, namely academic workload:

*To pass this course you need to study in your free time ... lots of hard work is required* (Participant #14, group interview, male, 20).

Financial challenges were a collective concern among the participants:

*There are issues with the bursaries ... if the bursaries aren't paying we can't study ...* (Participant #7, group interview, female, 22).

A possible unintended consequence of the massification of higher education in South Africa has been the financial burden placed on students (DHET, 2013). A significant proportion of South African students are recipients of state-subsidised bursaries. Given the complex challenges that South Africa encounters – e.g. a relatively small base of taxpayers, a disproportionately large section of society who are recipients of social grants, and large-scale unemployment – there is a growing need for financial assistance among university students (DHET, 2013). Solutions to this complex matter could mean the difference between students reaching their goals or not, as one participant indicated:

*All I ever wanted to be was a nurse ... can just pray that I get funding to finish my studies ... not sure what else I will do* (Participant #15, group interview, female, 21).

Analysis of the narrative sketches echoed the ideas shared during the group interview. Additionally, participants referred to the value of the participatory nature of the qualitative data collection process:

*This was the first time that I thought about my course in a really deep manner ... actually learned a lot from this exercise* (Participant #9, narrative sketch, male, 20).

*... dealing with different cultures can improve by having discussion like this* (Participant #15, narrative sketch, female, 21).

*... really refreshing to give an opinion about things that actually stress us ...* (Participant #2, narrative sketch, female, 21).

**The experience of stressors, deleterious and positive effects.** Participants pointed to the negative effects of stressors experienced during their practical training. Amongst others, participants suggested that stressors were negatively impinging on their academic studies, as well as intrapersonal and interpersonal relationships. The following quotes offer a glimpse into participants' experiences:
... practical training is very stressful ... lots of responsibility ... often doubt myself ... sometimes spills over to doubting myself and if I am good enough ... (Participant #3, group interview, female, 21).

... because of the high workload I don't spend as much time with family and friends ... feel guilty about not being there for others ... can't be there for patients and family ... strange that the more I give to my studies and helping people, the more I am neglecting my family and friends ... (Participant #11, narrative sketch, female, 21).

... it is difficult to balance all the challenges of being a nursing student. On the one hand you have to study for tests, exams, hand in assignments ... also have to work very long shifts during practical training ... contact with patients and doctors is really stressful ... hard to study, do practical training and remain optimistic with so many stressors ... (Participant #14, narrative sketch, male, 20).

Notwithstanding the challenges associated with nursing studies, participants also indicated that they experienced their roles to be particularly meaningful:

... to be a nurse means to heal someone else ... to care for others ... (Participant #2, narrative sketch, female, 21).

... making a difference to other people's lives makes the stress worthwhile ... the difficulty of nursing work makes it more important ... (Participant #7, narrative sketch, female, 22).

... studying to be a nurse is a fulfilling experience that I wouldn't trade for anything else in the world ... (Participant #11, group interview, female, 21).

This qualitative theme suggests that whereas nursing students do experience their practical training as stressful, they also acknowledge that their efforts are meaningful. Research indicates that stressful experiences and the experience of compassion fatigue and burnout are also associated with the experience of positive effects such as compassion satisfaction and meaning (Stamm, 2005).

Integration

The quantitative data indicated that participants are at risk for the development of compassion fatigue ($M = 21.13$, $SD = 7.79$) and burnout ($M = 19.32$, $SD = 7.21$). Additionally, data from the NSSS indicated that conflict with other nurses and workload were of particular concern among participants. The stressor, workload, was also significantly correlated to all the variables investigated in this study (see Table 2). Subsequently, workload appears to be an area of particular concern to participants. Notwithstanding possible deleterious effects, participants also reported high potential for compassion satisfaction ($M = 42.70$, $SD = 6.10$).
The qualitative data also pointed to the challenges posed by workload and highlighted compassion satisfaction:

... *having classes from 8:00 till late and attending practical is very difficult* ... (Participant #14, narrative sketch, male, 20).

... *love being a nurse* ... (Participant #16, narrative sketch, female, 19).

Additionally, the qualitative data identified prominent stressors that were not included in the quantitative instruments, for example time management, dealing with cultural diversity, academic workload, and financial challenges. More than that, though, participants reported that they experienced their involvement in the qualitative data collection process in a positive way:

... *I became aware of challenges and difficulties that I would otherwise never have acknowledged* ... (Participant #8, narrative sketch, female, 20).

... *communicating in the group assisted me to speak about what is inside my heart* ... (Participant #13, narrative sketch, male, 20).

... *feels nice to be heard, even if it’s just for research purposes*... (Participant #7, group interview, female, 22).

It subsequently appears as if the qualitative data collection process moved beyond just the *mere collection of subjective ideas* to focus on *facilitating reflective thinking* among participants. Such a participatory approach could assist researchers in refocusing their efforts from doing something to participants towards doing something with participants. Against the backdrop of complex 21st century challenges (Zuber-Skerritt, 2011), the aforementioned approach appeared to be of benefit, as one participant indicated:

... research mostly seems boring ... was actually exciting today ... learned a lot ... (Participant #4, female, narrative sketch, 20).

CONCLUSION

This study investigated stressors, as well as deleterious and positive effects thereof among a sample of nursing students. The quantitative data indicated that nursing students (1) are at high risk for the development of compassion fatigue and burnout, and (2) experience their training as satisfactory and relatively meaningful. As expected, prominent stressors were positively correlated with deleterious effects, and inversely related with positive effects.

The qualitative findings contextualised the quantitative results. More specifically, the qualitative data pointed to specific stressors that were not included in the quantitative
instruments, namely time management, dealing with cultural diversity, academic workload and financial challenges. Participants reported that they experienced a sense of growth from contributing to the qualitative data collection process.

The results of this study are limited due to the small and homogenous sample that was used. While the results may provide a relatively valid and reliable picture of nursing students’ experiences at one university, researchers ought to be careful not to generalise the findings to other contexts. Future studies could benefit from, amongst others, drawing larger samples from a variety of nursing-specific training institutions.

A second limitation relates to the use of quantitative instruments that were developed in Western contexts. The danger is that researchers could inadvertently assume that all participants, even those in African contexts, subscribe to Western values. The collection of qualitative data could be a valuable strategy to give voice to participants’ values. Furthermore, African researchers would do well to focus on the development of context-specific quantitative data collection instruments.

A third limitation is that a minority of male voices was included in this study. Additional male voices could have sketched a different picture compared to the majority of female perspectives. Even though nursing is regarded as a feminised profession (Mason & Nel, 2012), future studies could explore stressful experiences among male nurses.

Is it suggested that future research should explore the value of compassion satisfaction and meaning as buffers against deleterious effects. Additionally, researchers could consider drawing on participatory and reflective methodologies as a means of facilitating growth among participants during the data collection process (Zuber-Skerritt, 2011). Further research could assist nursing students, academics and psychologists in establishing novel measures to address the ubiquitous element of stress within the nursing profession. It is important that researchers investigate ways in which indigenous challenges specific to an African environment can be addressed. By addressing the indigenous challenges and the accompanying needs of nurses and nursing students, researchers could contribute to enhancing the quality of care offered to patients in the African context.

Stress is ubiquitous within the nursing profession. Nursing students are by no means immune to the deleterious effects of stress. Yet, the data indicated that nursing work remained meaningful to participants in spite of everyday stressors. Psychologists working in the university context, academics and relevant others can play important roles in helping nursing students manage stressful experiences while simultaneously celebrating positive effects.
BIOGRAPHICAL NOTE

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