

Stress and eustress in nursing students

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Abstract

Title. Stress and eustress in nursing students

Aim. This paper is a report of a study to identify experiences that led to both distress and eustress and to make recommendations to help students cope with course demands.

Background. Much of the research on stress in nursing students is quantitative in focus and all draws on their experience of distress, with little attempt to understand experiences of eustress.

Method. A series of focus groups were carried out with a volunteer sample of final year nursing students ($n = 16$) in the United Kingdom in 2007. The data were thematically analysed.

Findings. The themes identified were clinical experience, support, learning and teaching experience and course structure. There were experiences within each that were perceived as sources of distress and eustress. Many of the sources of distress concur with earlier findings but they are more likely to be experienced and commented on because the demands of present-day programmes and the profile of many nursing students mean that more effort is invested in meeting educational demands. The experiential learning and patient-care opportunity that placements provided was an important source of eustress.

Conclusion. Students who coped well drew on effective support networks and adopted a positive, optimistic perspective towards programme issues. Effective educators did not offer more time than those perceived as less effective but seemed more effective at tuning into students' concerns, showing more empathy and offering clearer guidance.

Keywords: empirical research report, focus groups, nursing, nursing education, nursing students, qualitative, stress

Introduction

Stress can be the result of 'too much or too little arousal resulting in harm to mind and body' (Schafer 1992, p. 14). There is a growing body of evidence that has looked at stress among nurses and nursing students and its effect on well-being (Parkes 1990, 1994, Beck & Srivastava 1991, Russler 1991, Heaman 1995, Jones & Johnston 1997, 1999, 2000).

Background

As illustrated in Figure 1, a certain amount of perceived stress and physiological arousal is necessary if one is to perform at the optimum (B). If the source of stress is perceived as negligible (A) or, more likely, is perceived as exceeding one's capacity to cope (C), then distress results (Yerkes & Dodson 1908). That optimal level of stress or arousal is called

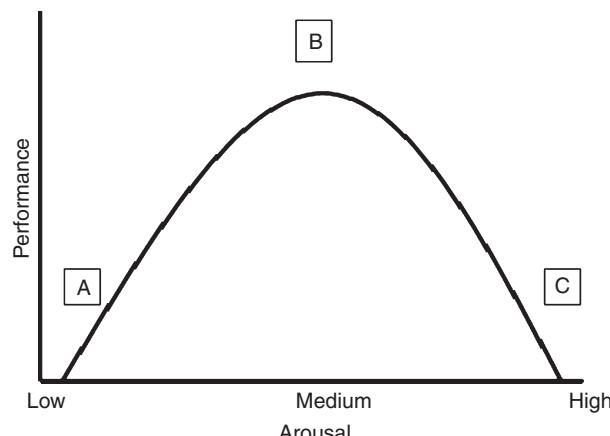


Figure 1 The Yerkes–Dodson curve.

'eustress' (Lazarus 1974) and little research has looked at sources of eustress in students (Association for University Counsellors (AUCC) 2002; Leicester University, 2002).

The Job-Demand-Control-Support Model (JDSCS) (Karasek & Theorell 1990) identifies the role of a number of occupational stressors or job demands and the moderating role played by perceived control and support. These moderators interact between perceived sources of stress and their affect on well-being. The perceived absence of control and support are additional stressors, as well as their presence offering the potential to help a person cope. As the most cited model of occupational stress, the JDSCS model has been effective in predicting well-being outcomes (Van Der Doef and Maes, 1998, 1999) but has rarely been applied to help understand student stress (Cotton *et al.* 2002).

The stresses reported among nursing students have been categorized as academic, clinical and personal sources of stress. Some of these overlap with the stress experienced by students generally. Sources of academic stress include examinations and assessments (Baldwin *et al.* 1998, Kipping 2000, Howard 2001), and the timing of examinations impacts particularly on the work-life balance of female students with children. This student characteristic is more common among nursing students compared to other student groups (Pryjmachuk & Richards 2007). In relation to workload, nursing students experience longer hours of study and an associated lack of free time (Jones & Johnston 1997, Kirkland 1998, Mahat 1998, Lo 2002).

Thomas (2002) identifies 'institutional habitus' as a major potential source of distress. A habitus, whether related to an individual, group or organization, refers to a disposition or set of values, expectations and norms. It characterizes how that individual, group or organization presents itself. The failure of the institutional habitus to dovetail with the habitus

of an ever-more diverse student population, such as the distinctive profile of nursing students being female, frequently mature and often with dependants, is seen as a contributory factor affecting student well-being, levels of distress and attrition rates (Thomas 2002, Pryjmachuk & Richards 2007).

Fear of failure and the teaching response to student need, as well as lack of timely feedback on assessments, have been reported by nursing students as specific stressors (Beck & Srivastava 1991, Jones & Johnston 1997), while the main clinical sources of stress relate to periods of clinical experience, or placements. Some of these stresses are common to those reported by practising nurses and include working with dying patients; conflicts with other staff; insecurity about one's clinical competence; interpersonal problems with patients and work overload (Rhead 1995, Snape & Cavanagh 1995). Additional stressors faced by nursing students include a perceived lack of practical skills (Kleehammer *et al.* 1990, Hamill 1995, Mahat 1998). The time pressures under which they are expected to operate on placement, together with evaluations of performance, are also reported (Jack 1992). The attitudes of some staff towards students and the general atmosphere on placements are other sources of reported stress (Wilson-Barnett *et al.* 1995, Mahat 1998, Howard 2001).

Personal sources of stress include financial concerns (Jones & Johnston 1997, Baldwin *et al.* 1998, Brown & Edelmann 2000, Lo 2002); lack of free time (Beck *et al.* 1997) and a concern about career direction (Leicester University, 2002). These issues are common among students generally (Leicester University, 2002) but they are more pronounced for nursing students because of the increased course demands; because it is a vocational course, which by definition limits career options, and because those demands affect significant numbers of mature females, where the changes have to be incorporated into home and family commitments (Pryjmachuk & Richards 2007).

The General Health Questionnaire (GHQ) has been used extensively in nursing student and other populations and, on this measure, nursing students experience levels of distress comparable or higher than that experienced by any other group of healthcare professionals, whether qualified or as a student, and that includes medical students (Fagin *et al.* 1995, Jones & Johnston 1997, Baldwin *et al.* 1998).

Measuring stress

Most studies have had a quantitative focus and, whilst there are clear merits to such an approach, there is a need to complement this by furthering our understanding using qualitative methods. Moreover, the inventories used to

catalogue stressors in nursing students and the reasons for leaving are only as good as the items they include and Jones and Johnston (2000), following a literature review, concluded that more research is needed to explore the link between stress and well-being.

What is common to all existing inventories exploring stress in nursing students (including the Stress in Nursing Students Questionnaire, Deary *et al.* 2003, and the Student Nurse Stress Index, Jones & Johnston 1999) is that they ask respondents to rate perceived stressors in terms of the extent to which they are distressing. Such an approach ignores the fact that those stressors may, at different times, lead to eustress or a level of stress that enhances performance. Deary *et al.* (2003) measured burnout and stress in nursing students and found increased perceived stress combined with increased levels of personal achievement, suggesting that often stress experiences were sources of eustress. It was this finding, combined with the dominance of studies that take a quantitative approach that informed the choice of method and research question in the study reported here.

The United Kingdom context

Across a range of professions within the United Kingdom (UK), nurses top the league table for female suicides (Kelly & Bunting 1998, Hawton *et al.* 2002). In recent years, the profession has also experienced recruitment problems (Department of Health 1999, Bucchan & Seccombe 2003) and stress has been identified as a factor linked to attrition among nursing students (Jones & Johnston 1997, Deary *et al.* 2003). Given the impact of stress in the nursing profession, it is imperative that attempts are made to understand the factors that give rise to it in nursing students. However, most of the research on nursing students has been performed in the USA, which has a longer history of higher education involvement in nurse education. Also, much of the work carried out in the UK has taken place in Scotland, where nursing is governed by different regulations and thus there are differences in course curricula. This is the first study to consider the sources of stress for nursing students in Northern Ireland.

The study

Aim

The aim of the study was to identify experiences that led to both distress and eustress and to make recommendations to help students cope with course demands.

Design

A qualitative research design was adopted, involving focus group interviews. A focus group brings together individuals with a shared experience and through group interaction participants' perspectives and views on the topic are discussed (Urden 2003).

Participants

A total of 16 students were recruited, on a volunteer basis, from a cohort of students following the adult nursing branch, the largest cohort. Students were invited to email the researcher after attending an information session outlining the aims of the study. Final year nursing students were targeted because they would have had the most experience of potential stressors. The age range was 18–42 and all were female, six were mature students and eight had children. The volunteers were assigned, on a convenience basis, to four groups of four. Between two and six is the optimal size for a focus group, as recommended by Morgan (1998).

Method

When conducting the focus groups, after a preliminary general conversation, the key aspects of the participant information sheet were re-iterated, including reference to the discussion being recorded and later transcribed for analysis. Each group was told the aim of the study. The researcher (CG) began by asking the students to comment on what they had enjoyed on the course generally, and then more specifically on the sources of stress – distress and eustress – related to the university, placements and experiences outside the university. Each session took place in a school teaching room and lasted approximately an hour.

Ethical considerations

The study was approved by a university ethics committee. The information sheet handed to students emphasized that participation was entirely voluntary; that they were free to leave at any time; that confidentiality and anonymity would be maintained at all time and that being involved would have no affect on course progression. Issues of confidentiality and possible feelings of coercion were reiterated by the researcher before the discussions began, especially that the views expressed would not affect student progression.

Data analysis

The focus groups were audio-recorded and later transcribed. The transcriptions were then read and re-read and the data reduced to key phrases and statements that captured recurring views (Polit & Hungler 1999). The patterns that emerged were then analysed as broad themes. An important aspect of focus group research is the dependability of the data (Kreuger 1998) or that different parties arrive at the same conclusions on the results. To achieve this, the transcripts were reviewed independently by a second researcher (MD) as a check on the themes obtained.

Findings

Four themes were identified from the data: clinical experience; levels and sources of support; learning and teaching experience and course structure.

Clinical experience

Clinical experience refers to the activities students engaged in to develop the clinical skills they will use on placement, including objective structured clinical examinations (OSCEs) as well as actual placement experiences. OSCEs empowered students and were a source of eustress for some. While students felt that such activities were important in preparing them for nursing demands, they also led to a difference between how, in theory, those skills should be practised compared to how they were actually practised:

Yeah. I found that very stressful – the difference in going out on placement and learning the skills on placement and coming back in the university to be told, ‘That’s not right’.

The frequency of working on understaffed wards made major time-pressure demands:

I think a lot depends on staff numbers. There are a good lot of wards that are short staffed...A lot of the time you’re rushed off your feet. You get little time to know them [patients].

What seemed to exacerbate the experience for a number of students was the difficulty of balancing day-to-day ward demands with the educational demands they simultaneously had to manage:

It’s just too much. It’s 37.5 hours a week on placement, so you’re doing a full-time job, plus your portfolio (used for student assessment), which really you could do with time off your placement to do it well and research it, and then to put in an assignment on top of that is crazy.

Despite the frustration that many felt because of such demands, students varied in how they approached placements and in terms of the rewards they reaped from it. One student commented on her first placement:

I had no ward experience and when I arrived it was like a rabbit caught in the headlights. But at the end they commented on how I’d progressed. I thought they would be thinking, ‘Here comes another first year student, she’ll be no use to us’. But if you make one bed or take one patient to the toilet it meant someone else didn’t have to do that, and that was a benefit, and your confidence grows.

The perceptions of the ward team were a critical factor in determining stress levels and how much students learnt and enjoyed the experience. Being a mature student seemed to make being accepted more likely. One student who came to the programme direct from school commented:

On placements I was treated like a child, and sometimes called a child and patted on the head like a child, which really annoyed me. It wasn’t the patients. They were fine. It was some of the staff that had a problem with my age.

Whilst the appearance of a mature student might help that student be accepted more, it was the perspective held by the student towards the opportunities the placement offered that was critical. If it was a positive attitude and one of optimism, then the experience was one they were more likely to cope with and learn from:

I’ve put a lot into all my placements. I’ve worked hard and I got a lot of reward back – when patients comment on how helpful and gentle you are. When you feel you can do something that is of benefit and help that patient’s experience while they’re in hospital, no matter how small that is, that’s the real reward.

Your confidence grows...you’re trying to be confident even though it’s your first time doing something. But that’s a real buzz – whenever you do it and you do it well. You think, ‘Just like a nurse. I did it just like a nurse’

Levels and sources of support

Students’ comments indicated a range of experiences on the types of support available and how useful that support was. Students were allocated a personal tutor who is a designated source of support for the duration of their studies, but there were inconsistencies in the quality of such support. There was also a feeling that the information support, through feedback comments on a portfolio, for example, was not always available or was not as constructive as it could be to help the student learn and cope better.

A common perception was that the tutors judged to be more effective in helping students manage their stress did not give excessively or any more time to a student, rather it was the quality of the interaction that was different – they would give their undivided attention to the student. Where the comments were negative, it reflected a student perception that some staff were unapproachable and distant – that it was part of the habitus of the school. For example, one student said, on referring to the first talk the students received as a group on entering their final year:

I thought that she's bound at some stage say, 'you're in third year now, well done, and you've obviously worked hard to get this far'. But it wasn't. It was, 'you're not allowed to do this, you're not allowed to do that'. It was just all very negative – no support.

For most of the respondents it was a feeling of being criticized rather than supported that added to the stress of the course demands:

It's not playing on your strengths. It's always what you're not doing. Not that you've done this really well or that really was good. The ones that are helpful are really brilliant.

When asked about the networking and support opportunities that come from socializing, a rite of passage for so many undergraduates, a number of students commented that they were too tired and exhausted, or there just wasn't the same opportunity. However, for many students, the demands and intensity of the course meant there was one valuable source of support that they were able to turn to – each other:

That's why I think in nursing everybody goes to friends. I know other people at X university, on other courses, and they would know, like, may be three people off their course. Where, here, you'd know most people because you have to turn to each other for support.

Returning to the university after placement was enjoyable because the support of friends was more readily available:

It's always lovely to get back into the university after the 7 week placement because you get to see all your friends again. It's great to talk about things again.

Learning and teaching experience

There were mixed feelings on the quality of the teaching. For some the standard was judged to be very high, both generally and in relation to some of the specific topics taught. On the general standard of teaching, two comments included:

When the tutor is able to tell a story around a point, I find it much easier to learn. The good lecturers I have heard are those that have hung points around their experience.

I've never had a bad teaching experience. They've all been good teachers. It would just be nice if some of them were approachable as well.

For others, the teaching experience was more varied. Most comments indicated that little learning occurred if the teaching style was overly didactic and void of meaningful examples. Much more learning occurred when the teacher engaged the students; offered clear applications and allowed more interaction.

While there was a recognition of the teachers' ability to communicate, there was a feeling that there was an inconsistency in students' experience of the pastoral side of the teaching role. However, what was striking was the extent to which all the respondents felt their learning was adversely affected by the disruptive behaviour of other students during lectures:

I feel like walking up and say 'Do you realise how rude you're being?'

It's a joke, It really is a joke.

Especially with a subject you find hard to grasp and you're trying to get your head round it and everybody's talking and all.

Classes cancelled at short notice and with no alternative arrangement was widely commented on as a source of stress. This was true for both lectures and tutorials. In addition, almost all respondents felt that basing tutorials largely round student-led presentations added to their stress and did not provide the learning opportunities they had hoped for. However, there were some who saw merit in student presentations, though all felt its use was excessive:

Personally I find presenting very difficult but it does force me to have to learn the topic well, so it does help me in that respect.

This student's comment reflected more typical views:

I personally just feel that they're a waste of time. I think the tutorials should be geared towards identifying the common problems that people have and working through this so you gain a deeper understanding of the material with everyone having some input based on what they've read and learnt prior to the tutorial.

A real concern for a number of students was the perception of a variation in tutor support and guidance, for example in the kinds of guidance material provided. This meant some students felt disadvantaged:

It's been continually raised by students over the last 3 years every time an assignment is due or an assessment is coming up. Some tutorial groups are getting a lot of input and guidance from their tutor and a lot aren't.

Students also commented on the variation in the effectiveness of the tutorial leaders – the teachers involved in facilitating and leading the tutorials. For some, a source of distress was that they felt the tutorial system did not equip them with the skills they would be expected to demonstrate during examinations:

I was expecting, in tutorials, that we'd have much more debate. To discuss and understand the pros and the cons, to try and critically analyse our questions, which we're supposed to be able to do in the examination.

Students also felt stressed and disadvantaged because of the delays in getting feedback on assessments in time to learn from that feedback for their next piece of work.

Course structure

There were a number of factors that related to the structure of the course that were seen as a source of distress. Some related to the level of organization and how key information was communicated to students:

I've found the early part each year so disorganised. Because of my family situation, I needed to know as much as possible about my timetable to be able to organise my childcare around it. The lack of information was a big stress factor.

For some, this early experience of disorganization on the course was very distressing:

Well that just starts the whole year off – it really creates a stress problem that can set the tone for what follows in the year.

Built into the course is the provision of a bursary. However, for the vast majority of students, this money only went some way to covering their living costs and this meant that most worked part-time and this added to their time pressures:

I find working all those extra hours so stressful – having to go from here straight to work and come home to do work for tomorrow's tutorials. I found that was the most stressful part.

The pace and intensity of the course was widely commented on:

You only get three or four weeks off and it all snowballs very quickly. If you don't hit your deadlines you would just go under very, very quickly.

Finally, the demands of the course were pushing many students to the edge of their ability to cope, such that any additional stressor led to disproportionate distress and this was frequently commented on by those with dependants.

Discussion

Some of the experiences that led to distress are similar to those found in earlier research, such as the lack of timely feedback and financial constraints. This, in turn, gave rise to the need to work part-time, adding time pressures for those on an undergraduate programme that was already regarded as intense (Jones & Johnston 1997). Clinical sources of stress included the attitudes of some staff; working on under-staffed wards and student status on placement. Initial placements were very distressing and the sheer pace and intensity on the ward was an experience that meant some became disillusioned with nursing as a career.

The JDGS model (Karasek & Theorell 1990) provides a framework in which to understand the results. The reference to time pressures contributes to a perceived absence of control and comments relating to attitudes of and relations with staff are an indicator of perceived support. However, students felt empowered with a sense of control by the opportunity to practice clinical skills before placement.

All the respondents believed that mature students were more readily accepted and respected on placement and were more likely to find it easier to fit in. This may reflect the attributions of other staff towards mature students and the greater life and communication skills mature students bring. In short, they appear to be more skilled at utilizing support systems.

It is important to note that it is not within the realm of a student, course manager or ward sister to control the various stressors that accompany any clinical experience, but it is within the capacity of the student to adopt the perspective and coping strategy that means they are able to take what they can from the experience. Whilst, for many, the experiential learning and patient-care opportunity placement provided was a source of eustress, it was the most enjoyable aspect for those with this positive perspective. Having a habitus or belief system that places a high premium on engaging in activities that make a difference is an important ingredient to successful coping not recognized by the JDGS model.

A number of the demands perceived as distressing in the university related to the nuances of the course – such as the perception of disorganization in the early stages; the quality of personal tutors; tutorials and some teaching; the limited opportunity to develop critical thinking; inconsistencies in

What is already known about this topic

- Quantitative methods dominate research into nursing student stress.
- Experiences of distress are common among students in general and also among nurses and nursing students.

What this paper adds

- Stressful experiences can simultaneously be both experiences of eustress and distress.
- Experiential learning and patient-care opportunities are important sources of eustress.
- Students who cope well draw on effective support networks and adopt a positive, optimistic perspective towards course demands.
- Effective educators do not offer more time than those perceived as less effective but seem more effective at tuning into students' concerns, showing more empathy and offering clearer guidance.

guidance material and cancelled classes. Together, these relate to the teaching and faculty response to student need, and whilst it is incumbent on course managers to monitor and look to redress such concerns, these remain 'living issues' on all programmes of study. It is noteworthy that the calibre of teaching, personal tutor support and experiences in tutorials were also important sources of eustress.

While many of these sources of distress are commonly reported on other courses, they are more likely to be commented on where the student has to invest more effort in that programme of study. Nursing courses attract larger numbers of female students, mature students and students with dependants. This means, as a cohort, they are more likely to commute further and invest more time and effort to make classes and meet course demands compared to most other student groups and therefore find more distressing those same stressors.

The students' perspectives indicated that the structure of the course failed to consider the needs of its large number of students with dependants. This is a concern raised by others (Baldwin *et al.* 1998, Kipping 2000, Pryjmachuk & Richards 2007) and reflects Thomas (2002) finding that the failure of the institutional habitus to dovetail with the habitus of an ever-more diverse student population is a factor affecting student well-being, levels of distress and attrition.

Some reported the student-led presentations as a eustress but all felt that this mode of learning was used too much and at the expense of other ways they could engage with their

subject. The benefits of experiential learning are well-documented (Sternberg & Zhang 2000), but the use of other types of student-centred learning, such as critical thinking activities will increase learning, eustress and was sought for by students.

Change brings with it stress (Cox 1993, Cooper & Williams 1994) and the unrelenting pace, time pressures and changing course demands commented on by these nursing students indicates that training to be a nurse holds significant potential for distress. Two important moderators or coping resources are a sense of control and support, but the pace of the course leaves the student with little sense of control. Moreover, nursing students are frequently fatigued, this and the profile of mature students on nursing programmes mean the students often do not experience the kinds of social life typical of most undergraduates, even compared to those training for other healthcare professions, such as medicine (Baldwin *et al.* 1998). This may reflect a student population with large numbers of mature students and students with dependants and it may reflect an institutional habitus which does not provide social opportunities for such students. However, it was peer support that was seen as an important source of eustress. Students drew on each other's understanding with assignments, in sharing clinical experiences, for friendship and laughter.

In terms of limitations, convenience sampling was used and the final sample was small and all were female. This means there is little way of knowing how representative and generalizable the results are. Wall *et al.* (1997) suggests comparing the results with other studies with similar populations to test for a possible non-response bias. The core of the stressors reported were not dissimilar to those reported in other studies, though for the eustress findings there was little with which to compare. Borrill *et al.* (1996) also suggests comparing those who responded when first invited to take part with those who required more prompting. In this case, the final focus group consisted of those students where more prompting was used and their responses were broadly similar. It is possible, despite reassurances to the contrary, that some students feeling expressing some views might affect their course progression. However, the breadth of comments expressed, both negative and positive, would indicate the students were being honest. A questionnaire allowing for anonymous responses could be an alternative method to reassure students.

Conclusion

To identify sources of distress when exploring stress in nursing students is to misconstrue what is meant by stress and

offers an incomplete picture of the student experience. One must also consider sources of eustress and recognize that academic, clinical and personal sources of stress can variously lead to distress and eustress. Moreover, given the distinctive profile of nursing students and the link between distress and course attrition (Deary *et al.* 2003), it would be useful to integrate course changes that consider the work-life balance of students with dependants.

The findings indicate a high premium was attached to support systems as a coping resource. It would be useful to encourage students to optimize social and peer relations in early induction activities and through learning and teaching initiatives.

Similarly, personal tutoring is a critical component in helping students to manage study demands. The effective tutors here did not offer more time but it was the quality of the interaction that differed. They were more tuned into students' concerns, showed more empathy and gave more guidance and it would be useful for all tutors to be reminded or refreshed on the skills that underpin 'active listening' (Tschudin 1995).

The students' perspectives and coping style were critical in determining a successful placement experience and in managing course demands. Students with such perspectives and coping strategies should be encouraged to share this with other students, such as more experienced students with new students during course induction and in the run up to their first placement.

Author contributions

CG and MD were responsible for the study conception and design and CG was responsible for the drafting of the manuscript. CG performed the data collection and data analysis. MM obtained funding and provided administrative support. CG made critical revisions to the paper. MD supervised the study.

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