CrossMark

Predictors of health of pre-registration nursing and midwifery students: Findings from a cross-sectional survey

Christine Deasy [a,*], Barry Coughlan [b], Julie Pironom [c], Didier Jourdan [c], Patricia Mannix-McNamara [d]

[a] Department of Nursing and Midwifery, University of Limerick, Limerick, Ireland
[b] Department of Psychology, University of Limerick, Limerick, Ireland
[c] Health Education Research Unit, Laboratoire ACTé, ESPE Clermont-Auvergne, Université Blaise Pascal, 36 Avenue Jean Jaurès CS 20001, Chamalières Cedex 63407, France
[d] Department of Education and Professional Studies, University of Limerick, Limerick, Ireland

ARTICLE INFO

SUMMARY

Background: Student nurses/midwives evidence less than exemplary lifestyle habits and poor emotional health, despite exposure to health education/promotion during their educational preparation. Knowledge of the factors that predict nursing/midwifery students' health could inform strategies to enhance their health and increase their credibility as future health promoters/educators.
Objective: To establish the predictors of nursing/midwifery student emotional health.
Design: Cross-sectional survey.
Setting: The research took place at a university in Ireland.
Participants: We involved a total sample ($n = 473$) student nurses/midwives.
Methods: Participants completed the General Health Questionnaire, Lifestyle Behaviour Questionnaire and Ways of Coping Questionnaire to determine their self-reported emotional health, lifestyle behaviour and coping processes. Multivariate regression was performed to identify the predictors of student emotional health (dependent variable). The independent variables were demographics, coping, lifestyle behaviour and students' perceptions of determinants of their health.
Results: Many respondents reported significant emotional distress (48.71%) and unhealthy lifestyle behaviours including smoking (27.94%), physical inactivity (34.29%), alcohol consumption (91.7%) and unhealthy diet (28.05%). Multivariate regressions indicated that the predictors of emotional distress included gender, year of study, smoking, passive coping and beliefs that their student life was stressful or/and that worry stress and boredom adversely impacted their diet.
Conclusions: Targeting student's beliefs regarding influences upon their health, promotion of positive lifestyles and adaptive coping is necessary to facilitate health gain of future health professionals.

Introduction

Nurses and midwives play an integral role in promoting health (Kemppainen et al., 2013; Lee et al., 2012) and influencing lifestyle choices among patients (Malik et al., 2011). Much emphasis is now placed on health promotion and lifestyle behaviour in nurse/midwife education programmes. However, the evidence suggests that while students may cognitively increase their knowledge of health and the link between adverse health behaviours and poorer individual health during their educational preparation, this learning may not be applied to their personal health behaviour (Alpar et al., 2008; Blake et al., 2011). Health risk behaviours such as smoking, poor diet, overweight/obesity, physical inactivity and excessive alcohol consumption (Blake and Harrison, 2013; Luszczynska and Haynes, 2009; Timmins et al., 2011; Watson

et al., 2006) are reported among pre-registration students. These behaviours may be linked to high levels of stress/psychological distress (Reeve et al., 2013; Pryjmachuk and Richards, 2008; Warbah et al., 2007) evidenced by these students' and maladaptive coping mechanisms (Davies and Coldridge, 2015; Timmins et al., 2011), which add to health risk. Knowledge of the factors that predict nursing/midwifery student health would assist in identifying at-risk students and inform strategies to address the issues.

Background/Literature

The lifestyle behaviour of pre-registration nursing and midwifery students (Blake and Harrison, 2013; Luszczynska and Haynes, 2009), similar to that of registered nurses and midwives (Bogossian et al., 2012; Schluter et al., 2012), is often less than exemplary. This has prompted calls for pre-registration nurses and midwives to embrace and role model healthy lifestyles (Blake and Harrison, 2013;

* Corresponding author.
E-mail address: christine.deasy@ul.ie (C. Deasy).

Bothamley et al., 2014). Health behaviours of student nurses/midwives are also important for future congruence between their own health and the promotion of health for others (Narayanasamy and Narayanasamy, 2006), as there is evidence that less than optimal personal health practices of health professionals adversely impacts their effectiveness (Alpar et al., 2008) and credibility (Hicks et al., 2008). Promoting health and positive lifestyle behaviours of future nurses/midwives early in their career is important in order to achieve congruence in their future health promotion role.

The emotional health of nursing students is cause for concern. They evidence significant levels of psychological (emotional) distress (Papazisis et al., 2008; Warbah et al., 2007). Psychological distress is an emotional state characterised by symptoms of depression and anxiety, which are associated with a perceived inability to cope effectively with stress (Ridner, 2004). Psychological distress can adversely impact academic performance (Pryjmachuk and Richards, 2007), acquisition of theoretical knowledge and clinical skills, and clinical work performance (Nerdrum et al., 2009). It also contributes to attrition (Papazisis et al., 2008), which may have funding implications for education providers and contribute to future nursing shortages. Furthermore, psychological distress can be an antecedent to more severe physical and mental problems (Papazisis et al., 2008) with adverse consequences for both the individual and the profession.

It is well established that nursing students experience much stress during their educational preparation (Reeve et al., 2013) and this, combined with ineffective coping, increases their risk of psychological distress (Watson et al., 2009). Both academic and clinical components of nursing programmes contribute to student stress (Wolf et al., 2015). Fear of academic failure/clinical incompetence, difficult relationships with faculty and time management issues were the main stressors (Wolf et al., 2015). Other stressors reported by nursing students are attributed to personal/social or external factors (Pryjmachuk and Richards, 2007; Jimenez et al., 2010). There is some evidence that midwifery education is also stressful (Khajehei et al., 2011; Pryjmachuk and Richards, 2008). However, fewer studies have examined the prevalence of stress or its impact on the psychological health of midwifery students as a distinct group (Khajehei et al., 2011). A recent study identified that over two-thirds of student midwives in one university in Ireland, reported that their degree programme was adversely impacting their mental health and attributed this to victimization, financial and responsibility pressures (Heaphy et al., 2015). Clinical and theoretical education was the main stressor perceived by both midwifery and nursing students in Turkey (Cilingir et al., 2011). The clinical setting, clinical practice, relationships with preceptors/clinical staff and intrapersonal factors are also stressors reported by midwifery students (Khajehei et al., 2011). Establishing nursing/midwifery students' emotional health status and the factors that predict their health may be an important initial step in raising their health profile and credibility as future health promoters/educators.

Method

Aim

The aim of this study was to establish the predictors of nursing/midwifery students' emotional health.

Study Design and Sample

A cross-sectional design was employed to establish predictors of emotional health of undergraduate nursing/midwifery students in a university in Ireland. All students ($n = 473$) registered in nursing (general, mental health and intellectual disability) and midwifery programmes were included. The response rate was 86% ($n = 406$).

Measures

This study used three instruments

(1) General Health Questionnaire (GHQ)

Students' emotional health was measured through the GHQ 28 (Goldberg, 1981); an extensively used and validated self-report measure with reliability coefficients from 0.78 to 0.95 in previous studies. Cronbach's alpha coefficient in this study was 0.92. The 28-item version which comprises four 7-item subscales measuring somatic symptoms, anxiety/insomnia, social dysfunction and severe depression was selected. The binary scoring method (0, 0, 1, 1) was chosen, with the total score ranging from 0 to 28. Scores of 5 or greater indicate significant distress (Jackson, 2007).

(2) Ways of Coping Questionnaire (WOC)

The WOC (Folkman and Lazarus, 1988) was selected to identify thoughts and actions participants used to cope with a specific stressful situation. The 66-item Likert-type self-report instrument had eight subscales, derived from factor analysis with reliability coefficients from 0.61 to 0.79 (Folkman and Lazarus, 1988). In this study, Cronbach's coefficient alpha ranged from 0.62 to 0.76. Subscales were classified as active (confrontive coping, seeking social support, planful problem solving and positive reappraisal) and passive (accepting responsibility, distancing, escape avoidance and self-control) strategies. This permitted the construction of a score summarizing the active or passive behaviour of a student (ranging from −1 to 1).

(3) Lifestyle Behaviour Questionnaire (LBQ)

The 37-item LBQ, designed for this study, was constructed following an extensive review of the literature. Some items were adapted from those used in similar international and national surveys including the "Behavioral Risk Factor Surveillance System Survey Questionnaire" (CDC, 2009) and the "College Lifestyle and Attitudinal National Survey" (Hope et al., 2005). The instrument included a combination of Likert, open and closed questions regarding demographic and social characteristics, diet and exercise, substance use and relationships and sexuality. An expert panel verified the face validity of the instrument and the pilot study ($n = 110$) plus interviews with students assisted in determining the ambiguity/clarity of the instrument. The alpha coefficient is 0.75 for the eleven items relative to diet.

The items of relevance to this paper are identified with response options in brackets. Questions to establish demographic and social characteristics included: gender (male and female); age category (17–26, 27–36, 37–46, 47+); marital status (single, married, separated, divorced, cohabiting and other); year of study (1, 2, 3, 4). The question, "Do you find that being a student is stressful?" (yes, sometimes, no) and the following statement was also included "I enjoy my course" (strongly agree, agree, neutral, disagree, strongly disagree). Items related to lifestyle included: "Please rate your diet" (very healthy, healthy, not healthy, unsure) and statements prefixed by "since I started college" and which had the same response options (strongly agree, agree, neutral, disagree, strongly disagree). "My eating pattern has changed"; "I generally eat more"; "I eat more food which contains carbohydrate such as pasta, potatoes, rice, cereal, bread and fruit"; "I eat more fruit and vegetables"; "I eat more convenience food"; "I have less sugar, confectionary and soft drinks". Students were asked to identify factors that impacted their diet (mood, money, worry, stress, boredom, exam pressure, drinking alcohol, other). Students rated their physical activity status (very active, active, not active, unsure). Substance use items included: do you currently smoke (tobacco)? (yes/no); how many cigarettes do you smoke daily? (0, 1–5, 6–10, 11–15, 16–20, 20+); do you drink alcohol? (yes/no); on average, how many days per week do you drink alcohol? (0–7).