Nurse Education in Practice 29 (2018) 30–34

Contents lists available at ScienceDirect

Nurse Education in Practice

journal homepage: www.elsevier.com/locate/nepr

Clinical education

Use of healthcare consumer voices to increase empathy in nursing students

Penny Heidke*, Virginia Howie, Tabassum Ferdous

School of Nursing and Midwifery, CQUniversity, 90 Goodchap Street, Noosaville, 4565, Queensland, Australia

ARTICLE INFO

Keywords:
Nurse education
Lived experience
Health care consumer
Empathy

ABSTRACT

Nurses need to be well prepared to address the needs of a diverse population and facilitate positive experiences in an equitable and inclusive approach to care. The aim of the study was to determine whether the integration of consumer lived experience interviews into the content of a first-year course influenced empathy in nursing students. A one group pre-test, post-test design was used. A convenience sample of first-year undergraduate nursing students (N = 32) from a regional Australian university was recruited for the study. The pre and post tests were conducted using the Kiersma Chen Empathy Scale and t-tests performed to analyse the data. Results showed overall that nursing students demonstrated moderate levels of empathy; pre-test score of (M = 75.53; SD = 5.76). After the intervention the post-test results showed that there was a statistically significant increase in students' empathy towards vulnerable, disadvantaged and stigmatised population groups. The healthcare consumer voice has the potential to strengthen current teaching practices that promote caring behaviours in nursing students.

1. Introduction

Healthcare professionals need to be well prepared to address the needs of a diverse population to facilitate positive experiences in an equitable and inclusive approach to care. Negative staff attitudes lead to lower levels of satisfaction in care for people from diverse population groups such as those who are vulnerable, disadvantaged and stigmatised, leading to poorer health outcomes and reluctance to seek health care in the future. Engaging in therapeutic nurse-patient relationships is fundamental to quality nursing care. Empathy, trust and respect are seen as critical components of this relationship, and are incorporated into professional standards and competencies for the nursing profession (Nursing and Midwifery Board of Australia [NMBA], 2016; Nursing and Midwifery Council, 2015). However, empathy, trust and respect are diminishing, according to various reports.

Ward et al. (2012) and Nunes et al. (2011), found empathy declined over a one-year period in student nurses. Also, Evans et al. (1998), maintains that learned empathy is not carried on into the post registration experience. These, and other authors (Chen et al., 2015), recommend that nurse educators need to look at innovative ways of teaching empathy and supporting empathic ability into their professional lives. Zaki and Ochsner (2012) define empathy as the ability and tendency to share and understand others' internal states. Empathic nurse-patient interactions that involve considerations of another person's perspective, together with the ability to communicate this understanding, leads to improved patient outcomes, satisfaction, and compliance with health information (Hojat, 2007; Reynolds et al., 2000). However, students and new graduates may have difficulties understanding and empathising with people from vulnerable, disadvantaged and stigmatised population groups, especially if they have not experienced any of the challenges associated with disability or stigma, for example. The involvement of healthcare consumers, sometimes known as service users, is one strategy being used in undergraduate education of students in both social work (Brown and Young, 2008; Duffy et al., 2013; Warren, 2007) and mental health (Blackhall et al., 2012; Happell et al., 2014); and, to a much lesser extent, in nursing. The aim of this paper is to report on an educational innovation that incorporated the voices and perspectives of health care consumers and its effect on student empathy in an Australian nursing undergraduate program.

2. Literature review

2.1. Empathy in nursing

In the nursing literature, empathy is widely seen as a vital component of quality nursing care and is part of the ethical and philosophical foundation for caring (Alligood, 1992; Maatta, 2006; Williams and Stickley, 2010). Empathic patient interactions lead to better patient outcomes,increased satisfaction and compliance (Hojat et al., 2011; Ward et al., 2012), as well as improvements in pain control, pulse and respiratory rates, and client self-report of worry and distress (Reynolds

* Corresponding author.
E-mail addresses: p.heidke@cqu.edu.au (P. Heidke), v.howie@cqu.edu.au (V. Howie), t_ferdous9@hotmail.com (T. Ferdous).

https://doi.org/10.1016/j.nepr.2017.11.007
Received 16 November 2016; Received in revised form 25 October 2017; Accepted 12 November 2017

and Scott, 2000). In a therapeutic world, empathy implicates more than transmission of information; it also includes conveying feelings, acknowledging these feelings and informing the patient that their feelings have been recognised (McCabe, 2004). Nurses are expected to engage in therapeutic and professional relationships, and in this are guided by the three 'Codes' in Australia: 'Registered nurse standards for practice', 'Code of Ethics for nurses in Australia' and 'Code of professional conduct for nurses in Australia'. The three 'Codes' ask that nurses communicate in a manner that is "respectful of a person's dignity, culture, [ethnicity], values, beliefs and rights" (NMBA, 2008a, p.1; NMBA, 2016, p.3), and "value the diversity of people" (NMBA, 2008b, p.1). Although these "Codes" are embedded into nurse curricula, evidence suggests there is still much work to be done for nurse educators.

Despite recognising its significant value in nurse-patient interaction by theorists, physicians and researchers (Peplau, 1997; Rogers, 1975), it is frequently found that there is an insufficient or lack of empathic communication between nurses and patients (McCabe, 2004; Ward et al., 2012; Williams et al., 2016). Neto et al. (2006), suggest that for student nurses, this could be due to the short period of exposure to the patients in clinical placement, where students may be more focussed on developing their theoretical and procedural knowledge than learning a new social skill to develop and enhance their communication with patients. As the core of therapeutic nurse-patient relationships, empathy is essential in understanding the health care needs of people, particularly those who belong to vulnerable, disadvantaged and stigmatised population groups (Porr et al., 2012), which are the groups central to this study. In light of this discussion, our situation demands a more holistic view of empathetic relations by wanting to develop a socially inclusive awareness in students when caring for the diverse patient group inherent in our course.

Australian Indigenous people, people with varying degrees of disabilities and mental illness, people who are homeless, and people from different racial and ethnic backgrounds where English is their second language are considered as vulnerable, disadvantaged and stigmatised population groups (AIHW, 2015; Queensland Council of Social Services (QCOSS), 2011). Poor communication between health service providers and patients lead to ineffective health care service for ethnic minorities (Fleming et al., 2015). Such health care service disparities for racial and ethnic minorities resulted in less involvement in decision making for their health needs and dissatisfaction with the provision of care (Smedley et al., 2009). Others affected by negative staff attitudes are illicit drug users (Young et al., 2005); people who are homeless (Moore et al., 2011); people with intellectual disability (Hemsley et al., 2012; Iacono et al., 2014); people from Culturally and Linguistically Diverse (CALD) communities (Komaric et al., 2012); and Indigenous Australians (Best and Fredericks, 2014). The prejudiced, stereotyping and discriminatory behaviour of health care providers intensify these disadvantaged patients' feelings of fear, misery, and vulnerability, and discourage them from accessing health care services (Emul et al., 2011; Goreczny et al., 2011). We posit that empathy is not just about the ability to understand a patient's experience and communicate in a manner that conveys recognition of patient concerns and perspectives (Ward et al., 2012). Our situation demands a more holistic view of empathetic relations by wanting to develop a lasting and socially inclusive awareness in students when caring for the types of patients described in our course. However, in a course that is offered by distance education delivery, we were posed with the problem of how to teach empathy.

2.2. Empathy in nurse education

Some researchers believe it is possible to prepare students for the empathetic process with the help of education (Chen et al., 2015). Bhana (2014), suggests that interpersonal skills are practical skills and therefore active participation in learning activities should be adopted as a teaching strategy. A report on empathy education in nursing (Brunero et al., 2010) found models of empathy education that were most effective were experiential styles of learning. A variety of experiential teaching strategies has been tested with positive results. Some studies with targeted educational strategies that aimed to develop empathy in nurse students have been conducted in the UK and USA (Ancel, 2006; Charlton et al., 2008; Chen et al., 2015). In the study by Chen et al. (2015), students engaged in a three-hour laboratory simulation game, playing the role of an older adult, which helped them gain an awareness of feelings and experiences related to ageing. Another study by Everson et al. (2015) consisted of an immersive 3D simulation experience whereby students played the role of an acutely unwell patient in a developing country to help them understand CALD patients' perspectives, with positive results. Other studies (Edwards et al., 2006; Krautscheid et al., 2008), adopted case study-experiential learning approaches using realistic content and events to create scenarios that allowed students to trial a range of clinical judgments with minimum risk. Other teaching strategies have included debates, role-playing, storytelling, journaling, web page links to audio and video clips, and simulation to develop interpersonal skills in students, adopting a deconstructive approach, and leading to learners becoming more engaged in their practices (Bhana, 2014). The use of health care consumers has also been explored as a learning approach in nurse education.

2.3. Integration of consumer lived experience

It is a challenge for educators to teach empathy about a particular population group without the lived experience of the people central to the interaction. Without the understanding of what it is like to be vision impaired, or homeless, or be a migrant from another country, it is difficult for a teacher to legitimise such situations in transforming knowledge. Exposing students to the various population groups they may ultimately be caring for, and allowing them to hear the stories and lived experiences of people, has the power to transform students to adopt an empathic stance as defined above. Engaging service users in health care provision and education is a directive of UK policy makers (Turnbull and Weeley, 2013). The use of consumers' lived experience as a pedagogical approach to learning and teaching has been explored in a variety of ways (Tremayne et al., 2014), although the studies were predominantly in the disciplines of social work and mental health (O'Donnell and Gormley, 2013; Stickley et al., 2009). Real-life vignettes featuring an Aboriginal elder were successfully used in social work education to transform student cognitive understanding of empathy and non-judgmental relationships (Gair, 2013). In nursing, such pedagogy has been successful in impacting on student attitudes in mental health (Blackhall et al., 2012; Happell et al., 2014; Simons et al., 2007), and intellectual disability nursing in the UK (Bollard et al., 2012). The use of first person memoirs in teaching mental health students about empathy, hope and guidance for people with eating disorders was found to be an empowering tool for both face-to-face and online learning (McAllister et al., 2014). However, there is a paucity of research on the use of health care consumer voices in pre-recorded interviews embedded into a course offered by distance education delivery mode to first-year nursing students.

2.4. Educational innovation

We redesigned a course on inclusive practice for nursing to include the voices and perspectives of a range of health care consumers who were representative of the diverse population groups in our course (Table 1). Consumers were purposefully recruited, interviewed, and after consenting (by way of signing a talent release consent form), to their image being released for education purposes, their conversation was video recorded. Quality checks, such as editing the digital recordings were carried out to maximise student engagement with the final media product. Consumers were asked to relate their stories, including good and bad experiences, and encouraged to tell students how

Table 1
List of consumer group types.

List of Consumer group types	
Vision impaired	Carer of child with multiple disabilities
LGBT (lesbian, gay, bi or trans-sexual)	Homelessness
Physical disability	African migrant
Mental health stigma	Tibetan refugee
Aboriginal or Torres Strait Islander people	Muslim religion

best to care for them and others in similar situations, as well as provide an overview of the qualities they believed a good nurse possessed.

The pre-recorded interviews were embedded into the 11 weekly modules of this online course as part of the course learning material. Students were to view them and using self-reflection, were encouraged to comment on how the content influenced their views and share these on the online discussion forum. The course learning outcomes expected that students would demonstrate an understanding of the concepts of cultural competence when caring for vulnerable, disadvantaged and stigmatised population groups. Using self-reflection as a strategy to determine their attitudes, students were guided to be socially inclusive in their practice when caring for persons who were different from themselves. The course was offered by distance education delivered in the Learning Management System (LMS), 'Moodle'.

Student participants completed the survey instrument (Kiersma-Chen Empathy Scale (KCES)) before commencing the course to establish baseline empathy and attitudes concerning vulnerable, disadvantaged and stigmatised populations. Students then completed the same survey at the end of the 12-week term so that any change could be measured. Students were asked to use an anonymous identifier to enable the researcher to link the pre- and post-tests.

3. Research design

The aim of the study was to determine whether the integration of consumer lived experience interviews into course content influenced empathy in first-year students in an undergraduate nursing program. The study utilised a quasi-experimental pretest-posttest design. Ethics approval to conduct the research was obtained from the University Human Research Ethics Committee (H15/03–025).

4. Data collection

A pre-test, post-test survey questionnaire using the (KCES) was used to determine any changes in student empathy during the term following an intervention. The KCES has been validated by Kiersma et al., in 2013 for use with nursing students (Cronbach's $\alpha = 0.75$) Chen et al. (2015) proclaim the KCES was created to measure both 'cognitive (the capacity to comprehend and view the world from another's perspective) and affective (capacity to connect to the experiences or concerns of others)' components. There are 15 items with four reverse coded items. Participants rate their level of agreement with the statements using a 7-point Likert-type scale, ranging from 7 = Strongly Agree to 1 = Strongly Disagree. The higher the score on the KCES, the higher the empathy level, with 15 indicating low empathy and increasing to a maximum of 105.

The pre-test questionnaire was made available to students in the course Moodle site at the beginning of the term and before census date to maximise the number of potential participants. Students were sent an invitation to participate in the study using the student group email system with follow-up reminders. Students were asked to create a unique key code identifier to maintain anonymity, which would be used again in the post-test survey so that data could be compared. The post-test survey was made available to students at the end of the term, and again, students were encouraged through the university group email system to complete the post-test questionnaire.

4.1. Statistical analyses

Statistical analyses of the data were performed using SPSS v. 22. The 'null hypothesis' being there is no significant change in empathy scores following interaction with consumer videos. Normal distribution was checked using histograms, QQ plot and Kolmogorov-Smirnov tests, the latter giving the required non-significant result. Pre-post changes were evaluated using paired sample *t*-tests since the data were normally distributed.

5. Results

Demographics were not specifically assessed in this anonymous online survey. However, the course being undertaken by the sample was a first-year course and the student cohort was predominantly female and aged between 18 and 58 years. The nursing students had moderate empathy towards vulnerable, disadvantaged and stigmatised population groups on the pre-test for KCES with the mean of all 79 participants being 76.88, $SD = 6.06$, the mean of the 32 matched pre-test scores was 75.53, $SD = 5.76$, maximum score possible = 105. There were only 33 post-test responses, of which 32 could be matched to the pre-tests.

A paired sample *t*-test was conducted to evaluate whether a statistically significant difference existed between the mean empathy scores before and after engaging in consumer video recordings. Assumption testing indicated no gross violation of assumptions. The results of the paired sample *t*-test were significant, $t\ (31) = -10.14$, $p < 0.005$, indicating that there is a significant increase in empathy scores from the pre-test ($M = 75.53$, $SD = 5.76$, $N = 32$) to the post-test (M = 86.91, SD = 8.21). The effect size was large based on Cohen's conventions (1988). Cohen's $d = (86.91–75.53) / 7.091604 = 1.604714$, meaning over 94% of the post-test group will be above the mean of the pre-test group (Cohen's U_3). The mean increase was 11.38, with the 95% confidence interval for the difference between the means of 9.09–13.66. The researcher rejected the null hypothesis.

In the individual item analysis of the KCES, 6 of the 15 items demonstrated statistically significant improvement ($p < 0.05$). These included: It is necessary for a healthcare practitioner to be able to comprehend someone else's experiences; I am able to express my understanding of someone's feelings; It is necessary for a healthcare practitioner to be able to express an understanding of someone's feelings; I am able to view the world from someone else's perspective; I have difficulty identifying with someone else's feelings; and To build a strong relationship with patients, it is essential for a healthcare practitioner to be caring (Table 2).

6. Discussion

The results of this study have revealed that the incorporation of healthcare consumer interviews into a first-year nursing course has been shown to significantly improve empathy in nursing students towards vulnerable, disadvantaged and stigmatised population groups. This result supports those of other studies conducted on undergraduate nurses that empathy scores can be significantly improved following targeted education strategies and interventions (Ancel, 2006; Chen et al., 2015; Cinar et al., 2007; Everson et al., 2015). Among these studies only Chen et al. (2015) used the full 15 item KCES to measure empathy level of the study participants. However, unlike the current study, Chen et al. (2015) investigated student nurses' empathy level towards older adult patients only. Also, the intervention was limited to a 3-hour period. Another study involving the KCES (Everson et al., 2015), used a modified eight-item version to determine the effect of 3D cultural simulation on the empathy levels of nursing students. The timeframe for using the intervention was 10 min, followed by a de-

Table 2
Pre-post changes in nursing student empathy (N = 32).

Items	KCES pre-test mean ± SD	KCES post-test mean ± SD	*p*
It is necessary for a healthcare practitioner to be able to comprehend someone else's experiences.	5.69 ± 1.35	6.13 ± 1.26	0.011[a]
I am able to express my understanding of someone's feelings.	5.47 ± 1.16	5.81 ± 1.18	0.032[a]
I am able to comprehend someone else's experiences.	5.28 ± 1.33	5.53 ± 1.29	0.292
I will not allow myself to be influenced by someone's feelings when determining the best treatment.[b]	3.19 ± 1.60	3.84 ± 1.82	0.096
It is necessary for a healthcare practitioner to be able to express an understanding of someone's feelings.	5.69 ± 1.06	6.31 ± 1.00	0.011[a]
It is necessary for a healthcare practitioner to be able to value someone else's point of view.	6.41 ± 0.67	6.63 ± 0.55	0.109
I believe that caring is essential to building a strong relationship with patients.	6.66 ± 0.55	6.78 ± 0.42	0.211
I am able to view the world from someone else's perspective.	5.44 ± 0.91	5.88 ± 1.10	0.021[a]
Considering someone's feelings is not necessary to provide patient-centred care.[b]	6.13 ± 1.01	6.00 ± 1.61	0.666
I am able to value someone else's point of view.	5.91 ± 1.00	6.25 ± 0.57	0.062
I have difficulty identifying with someone else's feelings.[b]	2.53 ± 1.27	5.31 ± 1.42	0.000[a]
To build a strong relationship with patients, it is essential for a healthcare practitioner to be caring.	1.63 ± 1.10	6.38 ± 1.13	0.000[a]
It is necessary for a healthcare practitioner to be able to identify with someone else's feelings.	5.78 ± 1.04	5.81 ± 1.26	0.893
It is necessary for a healthcare practitioner to be able to view the world from another person's perspective.	5.84 ± 0.77	6.06 ± 1.08	0.147
A healthcare practitioner should not be influenced by someone's feelings when determining the best treatment.[b]	3.91 ± 1.89	4.19 ± 1.86	0.418
Total score	75.53 ± 5.76	86.91 ± 8.21	0.000[a]

[a] Statistically significant, $p < 0.05$ 1 = Strongly Disagree, 7 = Strongly Agree.
[b] Reverse coded, 1 = Strongly Agree, 7 = Strongly Disagree.

briefing period. Our study included a more diverse population group and was conducted over an 11 week period.

In the current study, before commencing the course, the results indicated moderate levels of empathy among the nursing students, and after the intervention, empathy levels improved significantly. On the KCES, significant changes were observed in seven of the 15 items. Such a positive shift in scores indicates that after engaging with healthcare consumers' lived experiences, the study participants were able to recognise a strong change in empathetic behaviours through a self-reflective process. To provide empathetic care, nurses are required to connect to patients' experiences and feelings, and communicate their understanding (Davis, 1994). The results showed a statistically significant improvement in the participants' belief that it is necessary for them to be able to comprehend someone else's experiences. The item that showed the most significant improvement was the belief that to build a strong relationship with patients, it is essential for a healthcare practitioner to be caring. The mean showed that students initially disagreed with this statement. However, after listening to the consumers relate their personal stories, most students agreed with the statement.

Some other items demonstrate that educators may need to be more creative in the area of teaching empathy. For example, students were quite neutral to the statement that healthcare practitioners should not be influenced by someone's feelings when determining the best treatment. Even after the intervention, this had only improved slightly. This result may be attributed to the fact that the cohort were first-year students who had not been exposed to decision making in the clinical area yet. Chen et al. (2015) had similar findings to this item in their study, stressing the importance of incorporating patients' feelings into their care that demonstrates clinical empathy.

In a study by Evans et al. (1998), the researchers claimed that any empathic skills students developed in undergraduate courses were not continued into professional practice. Moreover, researchers suggested that the level of empathy gradually drops as the students make advancement through their degree (Ward et al., 2012). They also maintain that teaching by distance education where students rarely interact face-to-face with each other or with academics, has led to teaching methods lacking in human connectedness (Ward et al., 2012). Incorporating the healthcare consumer voice into distance education courses can help bridge the gap for students before engaging in clinical practice.

Recently, a study on empathy and burnout in nurses and nursing students argues that high levels of empathy can be protective against the development of burnout (Ferri et al., 2015). Therefore, it has been recommended that empathy education requires activities that heighten self-awareness and understanding of personal values among student nurses before making an effort to comprehend those of their patients (Stein-Parbury, 2005). The decision to commence empathy education from the first term of nursing students' tertiary education is also supported by Ouzouni and Nakakis (2012) who contend that for empathy to be transformed into empathic ability it needs to be fostered early. This transformation may assist the students to develop a sustainable humanistic behavioural skill for their professional endeavours. As our course is offered early in the curriculum and before the clinical placement experience, our pedagogical approach will hopefully prepare students well for quality patient interactions involving patients from diverse backgrounds.

7. Limitations

To avoid any disruption to study, the post-test survey was offered after the end of term when many students were disengaging from the course and thus possibly leading to the smaller sample size that could be matched to the pre-test responses. The reduced number may have limited the generalizability of the findings. As students reported their self-perceptions of empathy, they may have tended to choose items they believe were more socially desirable and avoid those not deemed socially desirable, in order to demonstrate a more positive attitude. Such an approach could have positively skewed the result. The study was conducted on first-year students, with no follow-up over time. Further studies are needed that examine the effects of an intervention on empathy levels over longer periods of time.

8. Conclusion

Teaching online has many challenges, more so when target skills are more readily recognised as experiential. Other challenges include maintaining student engagement, and providing authentic learning experiences to enable transformation from student to clinician, and that have long-lasting effects. Therefore, embedding innovative teaching strategies such as the voice of healthcare consumers into first-year courses can enhance engagement and improve behavioural skills such as empathy in nursing students. Such strategies have the power to impact on students who may never have had contact with, or experienced any of the challenges associated with people from vulnerable, disadvantaged and stigmatised groups. The KCES instrument is useful to gauge whether specific strategies are successful at increasing empathy in nursing students.

Funding

This work was supported by the Learning and Teaching services at CQUniversity [grant number RSH/3458].

Conflict of interest

The authors have no conflict of interest with this study.

Ethical approval details

Ethics approval to conduct the research was obtained from the University Human Research Ethics Committee (H15/03–025).

Acknowledgements

Appreciation goes to the healthcare consumers who shared their lived experiences. We also thank those students who gave up their time to complete the pre-test and post-test survey questionnaires.

References

Ancel, G., 2006. Developing empathy in nurses: an inservice training program. Archives Psychiatric Nurs. 20, 249–257.
Alligood, M.R., 1992. Empathy: the importance of recognizing two types. J. Psychosoc. Nurs. Ment. Health Serv. 30 (3), 14–17.
Australian Institute of Health and Welfare (AIHW), 2015. Australia's Welfare 2015. Australia's Welfare Series No. 12. Cat. No. AUS 189. AIHW, Canberra Viewed 20 October. http://www.aihw.gov.au/australias-welfare/2015/diversity-and-disadvantage/.
Best, O., Fredericks, B., 2014. Yatdjuligin: Aboriginal and Torres Strait Islander Nursing & Midwifery Care. Cambridge University Press, Port Melbourne.
Bhana, V.M., 2014. Interpersonal skills development in Generation Y student nurses: a literature review. Nurse Educ. Today 34 (12), 1430–1434.
Blackhall, A., Schafer, T., Kent, L., Nightingale, M., 2012. Service user involvement in nursing students training. Ment. Health Pract. 16 (1), 23–26.
Bollard, M., Lahiff, J., Parkes, N., 2012. Involving people with learning disabilities in nurse education: towards an inclusive approach. Nurse Educ. Today 32, (2), 173–177.
Brown, K., Young, N., 2008. Building capacity for service user and carer involvement in social work education. Soc. Work Educ. 27 (1), 84–96.
Brunero, S., Lamont, S., Coates, M., 2010. A review of empathy education in nursing. Nurs. Inq. 17 (1), 65–74.
Charlton, C.R., Dearing, K.S., Berry, J.A., Johnson, M.J., 2008. Nurse practitioners' communication styles and their impact on patient outcomes: an integrated literature review. J. Am. Acad. Nurse Pract. 20, 382–388.
Chen, A.M., Kiersma, M.E., Yehle, K.S., Plake, K.S., 2015. Impact of the Geriatric Medication Game® on nursing students' empathy and attitudes toward older adults. Nurse Educ. Today 35, 38–43.
Cinar, N., Cevahir, R., Sahin, S., Sozeri, C., Kuguoglu, S., 2007. Evaluation of the empathic skills of nursing students with respect to the classes they are attending. Rev. Eletrônica Enferm. 9, 588–595.
Cohen, J., 1988. Statistical Power Analysis for the Behavioral Sciences, second ed. Lawrence Earlbaum Associates, Hillsdale, NJ.
Davis, M., 1994. Empathy: a Social Psychological Approach. Brown & Benchmark, Maddison, W1.
Duffy, J., Das, C., Davidson, G., 2013. Service user and carer involvement in role-plays to assess readiness for practice. Soc. Work Educ. 32 (1), 39–54.
Edwards, N., Peterson, W., Davies, B.L., 2006. Evaluation of a multiple component intervention to support the implementation of a 'therapeutic relationships' best practice guideline on nurses' communication skills. Patient Educ. Couns. 63, 3–11.
Emul, M., Uzunoglu, Z., Sevinç, H., Güzel, Ç., Yılmaz, Ç., Erkut, D., Arıkan, K., 2011. The attitudes of preclinical and clinical Turkish medical students toward suicide attempters. Crisis 32 (3), 128–133. Viewed at. http://www.kemalarikan.com/wpcontent/uploads/pdf/arikan_suicide_stigma.pdf.
Evans, G.W., Wilt, D.L., Alligood, M.R., O'Neil, M., 1998. Empathy: a study of two types. Issues Ment. Health Nurs. 19, 453–461.
Everson, N., Levett-Jones, T., Lapkin, S., Pitt, V., Riet, P., Rossiter, R., Jones, D., Gilligan, C., Courtney-Pratt, H., 2015. Measuring the impact of a 3D simulation experience on nursing students' cultural empathy using a modified version of the Kiersma-Chen Empathy Scale. J. Clin. Nurs. 24 (19–20), 2849–2858.
Ferri, P., Guerra, E., Marcheselli, L., Cunico, L., Di Lorenzo, R., 2015. Empathy and burnout: an analytic cross-sectional study among nurses and nursing students. Acta Bio-Medica Atenei Parm. 86 (Suppl 2), 104–115.
Fleming, B., Thomas, S., Burnham, W., Charles, L., Shaw, D., 2015. Improving ethnocultural empathy in healthcare students through a targeted intervention. J. Cult. Divers. 22 (2), 59–63.
Gair, S., 2013. Inducing empathy: pondering students' (in)ability to empathize with an Aboriginal man's lament and what might be done about it. J. Soc. Work Educ. 49 (1), 136–149.
Goreczny, A.J., Erin, E.B., Guy, C., Celia, S.F., 2011. Attitudes toward individuals with disabilities: results of a recent survey and implications of those results. Res. Dev. Disabil. 32 (5), 1596–1609.
Happell, B., Byrne, L., Plantania-Young, C., Harris, S., Bradshaw, J., Davies, J., 2014. Lived-experience participation in nurse education: reducing stigma and enhancing popularity. Int. J. Ment. Health Nurs. 23 (5), 427–434.
Hemsley, B., Balandin, S., Worral, L., 2012. Nursing the patient with complex communication needs: time as a barrier and a facilitator to successful communication in hospital. J. Adv. Nurs. 68 (1), 116–126.
Hojat, M., 2007. Empathy in Patient Care: Antecedents, Development, Measurement, and Outcomes. Springer Science & Business Media, Berlin.
Hojat, M., Louis, D., Markham, F., Wender, R., Rabinowitz, C., Gonnella, J., 2011. Physician's empathy and clinical outcomes for diabetic patients. Acad. Med. 86 (3), 359–364.
Iacono, T., Bigby, C., Unsworth, C., Douglas, J., Fitzpatrick, P., 2014. A systematic review of hospital experiences of people with intellectual disability. BMC Health Serv. Res. 14 (1), 327–342.
Komaric, N., Bedford, S., van Driel, M., 2012. Two sides of the coin: patient and provider perceptions of health care delivery to patients from culturally and linguistically diverse backgrounds. BMC Health Serv. Res. 12 (322), 1–14.
Krautscheid, L., Kaakinen, J., Warner, J.R., 2008. Clinical faculty development: using simulation to demonstrate and practice clinical teaching. J. Nurs. Educ. 47 (9), 431–434.
Maatta, S.M., 2006. Closeness and distance in the nurse-patient relation. The relevance of Edith Stein's concept of empathy. Nurs. Philos. 7, 3–10.
McAllister, M., Lee Brien, D., Alexander, J., Flynn, T., 2014. Exploring the educative potential of eating disorder memoirs. J. Ment. Health Train. Educ. Pract. 9 (2), 69–78.
McCabe, C., 2004. Nurse–patient communication: an exploration of patients' experiences. J. Clin. Nurs. 13, 41–49.
Moore, G., Manias, E., Gerdtz, M., 2011. Complex health service needs for people who are homeless. Aust. Health Rev. 35 (4), 480–485.
Neto, C., Shalof, T., Costello, J., 2006. Critical care nurses' responses to patient photographs displayed at the bedside. Heart & Lung J. Acute Crit. Care 35, 198–204.
Nunes, P., Willams, S., Bidyashar, S., Stevenson, K., 2011. A study of empathy decline in students from five health disciplines during their first year of training. Int. J. Med. Educ. 2, 12–17.
Nursing and Midwifery Board of Australia (NMBA), 2008a. Code of Ethics for Nurses in Australia. Available online at: http://www.nursingmidwiferyboard.gov.au/.
Nursing and Midwifery Board of Australia (NMBA), 2008b. Code of Professional Conduct for Nurses in Australia. Available online at: http://www.nursingmidwiferyboard.gov.au/.
Nursing and Midwifery Board of Australia (NMBA), 2016. Registered Nurse Standards for Practice. Available online at: http://www.nursingmidwiferyboard.gov.au/.
Nursing and Midwifery Council, 2015. Available online at. The Code: Professional Standards of Practice and Behaviour for Nurses and Midwives. . www.nmc-uk.org.
O'Donnell, H., Gormley, K., 2013. Service user involvement in nurse education: perceptions of mental health nursing students. J. Psychiatric Ment. Health Nurs. 20, 193–202.
Ouzouni, C., Nakakis, K., 2012. An exploratory study of student nurses' empathy. Health Sci. J. 6 (3), 534.
Peplau, H.E., 1997. Peplau's theory of interpersonal relations. Nurs. Sci. Q. 10, 162–167.
Porr, C., Drummond, J., Olson, K., 2012. Establishing therapeutic relationships with vulnerable and potentially stigmatized clients. Qual. Health Res. 22, 384–396.
Queensland Council of Social Service (QCOSS), 2011. The Social Determinants of Health. Viewed 20 October 2016. https://www.qcoss.org.au/sites/default/files/QCOSS_Policy_Position_Aug_2011_Social_Determinants_of_Health.pdf.
Reynolds, W.J., Scott, B., 2000. Do nurses and other professional helpers normally display much empathy? J. Adv. Nurs. 31, 226–234.
Reynolds, W., Scott, B., Austin, W., 2000. Nursing, empathy and perception of the moral. J. Adv. Nurs. 32 (1), 226–234.
Rogers, C.R., 1975. Empathic: an unappreciated way of being. Couns. Psychol. 5, 2–10.
Simons, L., Tee, S., Lathlean, J., Burgess, A., Herbert, L., Gibson, C., 2007. A socially inclusive approach to user participation in higher education. J. Adv. Nurs. 58 (3), 246–255.
Smedley, B.D., Stith, A.Y., Nelson, A.R., 2009. Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care. National Academies Press, Washington, DC.
Stein-Parbury, J., 2005. Patient and Person: Developing Interpersonal Skills in Nursing, third ed. Elsevier, Sydney.
Stickley, T., Rush, B., Shaw, R., Smith, A., Collier, R., Cook, J., Shaw, T., Gow, D., Felton, A., Roberts, S., 2009. Participation in nurse education: the pine project. J. Ment. Health Train. Educ. Pract. 4, 11–18.
Tremayne, P., Russell, P., Allman, H., 2014. Service user involvement in nurse education. Nurs. Stand. 28 (22), 37–41.
Turnbull, P., Weeley, F.M., 2013. Service user involvement: inspiring student nurses to make a difference to patient care. Nurse Educ. Pract. 13 (5), 454–458.
Ward, J., Cody, J., Schaal, M., Hojat, M., 2012. The empathy enigma: an empirical study of decline in empathy among undergraduate nursing students. J. Prof. Nurs. 28 (1), 34–40.
Warren, J., 2007. Service user and carer participation in social work. Learn. Matters Available online at: www.learningmatters.co.uk.
Williams, J., Stickley, T., 2010. Empathy and nurse education. Nurse Educ. Today 30, 52–755.
Williams, B., Boyle, M., Howard, S., 2016. Empathy levels in undergraduate paramedic students: a three-year longitudinal study. Nurse Educ. Pract. 16, 86–90.
Young, M., Stuber, J., Ahern, J., Galea, S., 2005. Interpersonal discrimination and the health of illicit drug users. Am. J. Drug Alcohol Abuse 31, 371–391.
Zaki, J., Ochsner, K.N., 2012. The neuroscience of empathy: progress, pitfalls and promise. Nat. Neurosci. 15 (5), 675–680.