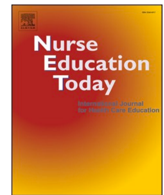
Nurse Education Today 114 (2022) 105403

Contents lists available at ScienceDirect

Nurse Education Today

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



Research article

Development of a spiritual care education matrix: Factors facilitating/ hindering improvement of spiritual care competency in student nurses and midwives

Linda Ross [a,*], Tove Giske [b], Adam J. Boughey [c], René van Leeuwen [d], Josephine Attard [e], Tormod Kleiven [f], Wilfred McSherry [g,h]

[a] *Professor of Nursing School of Care Sciences, Faculty of Life Sciences & Education, University of South Wales, Pontypridd CF37 1DL, UK*
[b] *Professor of Nursing Faculty of Health Studies, VID Specialized University, Ulriksdal 10, 5009 Bergen, Norway*
[c] *Lecturer in Adult Nursing, Post-Doctoral Researcher, Chartered and Registered Health Psychologist School of Health, Science and Wellbeing, Staffordshire University, Leek Road, Stoke-on-Trent, Staffordshire ST4 2DF, UK*
[d] *Professor emeritus Faculty of Health Care, Viaa Christian University of Applied Sciences, Zwolle, Netherlands*
[e] *Head of Department (Midwifery) Faculty of Health Sciences, University of Malta, Malta*
[f] *Professor in Science and Director of Centre of Diakonia and Professional Practice VID Specialized University, P.O. Box 184 Vinderen, NO-0319 Oslo, Norway*
[g] *Professor in Nursing Department of Nursing, School of Health, Science and Wellbeing, Staffordshire University Stoke-on-Trent, University Hospitals of North Midlands NHS Trust, Stoke-on-Trent/Stafford, England, UK*
[h] *VID Specialized University Bergen/Oslo, Norway*

A R T I C L E I N F O

Keywords:
Spiritual care education
Spiritual care competency factors
EPICC matrix
Model testing
Nursing/midwifery competency
Nursing/midwifery curricula

A B S T R A C T

Spiritual care is a fundamental aspect of caring and compassionate nursing/midwifery practice. However, nurses/midwives consistently report feeling unprepared to provide spiritual care for various reasons. A key reason appears to be the lack of structured spiritual care education in undergraduate nursing/midwifery curricula.

Between 2016 and 2019, the three-year, European EPICC project ('Enhancing nurses' and midwives' competence in Providing spiritual care through Innovative education and 'Compassionate Care') sought to address gaps in nursing/midwifery competence in spiritual care. A key project output, and the focus of this paper, is the EPICC Gold Standard Matrix for Spiritual Care Education ('EPICC Matrix'), which depicts the complex array of factors hindering/facilitating the development of nursing/midwifery spiritual care competency. The EPICC project followed two major studies that identified factors contributing to nursing/midwifery spiritual care competency development. This evidence, along with the mixed methods focus of the EPICC project to enable co-projection of its outputs informed the development of the EPICC Matrix.

The EPICC Matrix was considered to represent 'the cultural, social and political environment in which spiritual care competency develops' in student nurses/midwives. The EPICC Matrix illustrates spiritual care educational considerations during the process of selecting suitable nursing/midwifery students; through the specific aspects of the teaching and learning environment, the student as a person, and the clinical environment in which spiritual care competency develops; and finally, how the student is assessed as competent in providing spiritual care.

Recent research supports the use of the EPICC Matrix in undergraduate nursing/midwifery curricula and strengthens the case for support of the other EPICC project outputs, including: the EPICC Spiritual Care Education Standard, EPICC Adoption Toolkit, and the continuation of the EPICC Network. Further testing of the EPICC Matrix to determine its relevance in different cultural/professional contexts within and outside of Europe would be welcomed.

* Corresponding author.
E-mail addresses: linda.ross@southwales.ac.uk (L. Ross), tove.giske@vid.no (T. Giske), Adam.Boughey@staffs.ac.uk (A.J. Boughey), josephine.attard@um.edu.mt (J. Attard), tormod.kleiven@vid.no (T. Kleiven), W.McSherry@staffs.ac.uk (W. McSherry).

https://doi.org/10.1016/j.nedt.2022.105403
Received 28 January 2022; Received in revised form 6 April 2022; Accepted 9 May 2022
Available online 13 May 2022
0260-6917/© 2022 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY license (http://creativecommons.org/licenses/by/4.0/).

1. Background

Spiritual care is expected of nurses and midwives (NMC, 2018; ICN, 2021) but nurses and midwives continue to report feeling unprepared for this aspect of their practice internationally (Royal College of Nursing, 2011; Jones et al., 2021). Several factors may account for this lack of preparedness which include: lack of clarity about how 'spirituality' and 'spiritual care' are understood (Galutira et al., 2019; Sena et al., 2021); absence of spiritual care competences outlining the knowledge, skills and attitudes that can reasonably be expected of them as non-specialist spiritual care providers (van Leeuwen et al., 2009; Attard et al., 2019a, 2019b); limited understanding of the factors contributing to development of spiritual care competency (SCC) (McSherry et al., 2020); and a lack of supportive evidence-based educational resources to prepare them for spiritual care practice (McSherry et al., 2020; Jones et al., 2021; Rykkje et al., 2021).

The EPICC project (2016–2019), funded by the European Commission and led by 6 Partners (authors: LR, WM, TG, JA, RvL, TK) from five countries, sought to address these gaps. EPICC stands for 'Enhancing nurses' and midwives' competence in Providing spiritual care through Innovative education and Compassionate Care'. The project's novel evidence-based outputs were co-produced over three years by 31 nursing/midwifery educators from 21 European countries with input from over 20 stakeholders (McSherry et al., 2021). Outputs included:

1) The 'EPICC Spiritual Care Education Standard' ('EPICC Standard'), which clarifies how 'spirituality' and 'spiritual care' are understood for nursing/midwifery practice across Europe and provides four core spiritual care competencies, (derived from an original list of 54 identified by Attard et al., 2019a, 2019b), that student nurses/midwives should achieve by the time they register (van Leeuwen et al., 2021). The four competencies are i) Intrapersonal spirituality ii) Interpersonal spirituality iii) Spiritual care: assessment & planning iv) Spiritual care: intervention & evaluation (www.epicc-network.org).

2) The 'EPICC Adoption Toolkit' ('EPICC Toolkit') containing educational resources to help students to attain competence (available at: www.epicc-network.org under 'Resources and Tools').

3) The EPICC Gold Standard Matrix for Spiritual Care Education ('EPICC Matrix'), which depicts the complex array of factors facilitating/hindering the development of spiritual care competency.

4) The 'EPICC Network' which enables sharing of best practice supported by a website which hosts the EPICC project's outputs and supports ongoing networking activities (www.epicc-network.org).

2. Aim

The aim of this paper is to report on the development of the EPICC Matrix.

3. Evidence to underpin the EPICC Matrix

One of the gaps identified was a limited understanding and evidence of the factors contributing to development of SCC in nursing/midwifery students. This information is important for educators in recruiting students and in designing evidence-based teaching and learning resources that support students' SCC development.

However, when we reviewed the literature in 2010 (Ross et al., 2014) and again in 2016 (Ross et al., 2018) we found a dearth of evidence. Studies made two claims: (1) spiritual care teaching results in greater understanding of the complexity of spirituality and increases confidence in engaging with spiritual care, and (2) personal beliefs and values of the nurse/student are key in perceived SCC. However, all studies were limited by study design (small samples, single centre, cross-sectional) with variation in rigour making it difficult to reach firm conclusions. A robust multinational prospective longitudinal study was needed.

3.1. Pilot study (2010)

Five EPICC Partners (LR, WM, TG, RvL, and the late Donia Baldacchino) led a cross-sectional pilot study in 2010 with a convenience sample of 619 nursing/midwifery students (86% response rate) at six universities in four European countries to test the intended research methods, instruments, and data analysis strategy for the planned multinational prospective longitudinal main study aimed at identifying factors contributing to SCC. The pilot study confirmed the appropriateness of the proposed methods (descriptive survey design), analysis strategy, and instruments (outcome measures). The outcome measures comprised four validated questionnaires measuring: perceived SCC (Spiritual Care Competency Scale [SCCS] [van Leeuwen et al., 2009]), perception of spirituality/spiritual care (Spirituality & Spiritual Care Rating Scale [SSCRS] [McSherry et al., 2002]), personal spirituality (JAREL Spiritual Wellbeing Scale [Hungelmann et al., 1996]; Spiritual Attitude & Involvement Scale [SAIL] [Meezenbroek et al., 2008]) (Ross et al., 2014). Exploratory data analysis clarified what the literature had suggested (Table 1).

3.2. Multinational prospective longitudinal correlational study (2011–2016)

Four EPICC Partners (LR, WM, TG, RvL) led the main study between 2011 and 2016 using the pilot study template. Measures were completed by a convenience sample of nursing/midwifery students enrolled at 21 universities in eight European countries at the start of years 1 (response rate 69%; 2193 from a possible 3175), 2, 3, and at course end (response rate 33%; 595 from a possible 1821). The headline findings are shown in Table 2.

4. Methods

4.1. Design

The EPICC project used a mixed methods design including a series of qualitative, facilitated face-to-face iterative action learning cycles and quantitative consensus online surveys (using the platform Enalyzer; www.enalyzer.com) based on the principles of Delphi research (Polit and Beck, 2012).

4.2. Ethics

Ethical approval was obtained from the Faculty of Health Sciences Ethics Panel, Staffordshire University on 21.2.2017. Participants provided signed agreement from their universities to take part. This resulted in a high level of engagement meaning that the outputs were rigorously tested ensuring that they were fit for purpose. A Project Manager (author AJB) and Project and Portfolio Coordinator (TW) ensured that all activities were General Data Protection Regulation (GDPR) compliant.

Table 1
Pilot headline findings (Ross et al., 2016).

Factors significantly correlated with perceived or self-reported spiritual care competency were:
1) Personal spirituality of the student measured by:
• Spiritual wellbeing (JAREL $p < 0.001$) (high score preferable). • Spiritual attitude/involvement (SAIL $p < 0.001$) (high score preferable). • Being religious ($p = 0.017$) and engaging in spiritual/religious activities (range $p < 0.001$ to $p = 0.029$) (demographic questionnaire).
2) Student's perception of spirituality/spiritual care (SSCRS $p = 0.002$) (awareness of the full range of religious and non-religious expressions of spirituality is preferable).

Table 2
Main study headline findings (Ross et al., 2018)

1. The only factors strongly and consistently correlated (at all 4 time points) with perceived spiritual care competency were:

- Students' own spirituality: spiritual wellbeing (JAREL r range 0.15–0.33, $p < 0.01$), spiritual attitude & involvement (SAIL r range 0.29–0.41, $p < 0.01$), with high scores being preferable.
- Students' perception of spirituality/spiritual care (SCCRS, r range 0.32–0.55 $p < 0.01$), where holding a broad view was preferable.

2. The following factors were inconsistently (at 1–3 time points) and weakly correlated (r range −0.04–0.19; p range non-significant – $p < 0.01$) with perceived competency:

- Religion, practise of spiritual/religious activities, age, previous healthcare experience, studying at a religious/secular university, experience of any life event (positive or negative).

3. Perceived spiritual care competency develops over time (SCCS, 0.4 increase from year 1 to end of course, $p < 0.01$).

4. Caring for patients, teaching/opportunity for discussion, and experience of personal life events (in that order) were identified by students as important in learning about spiritual care.

4.3. Participants

There were 58 participants from 21 European countries. They were made up of three groups; six EPICC Partners (funding applicants); 31 pre-registration nursing/midwifery educators from 21 European countries; and 21 international stakeholders (e.g. students, educators, clinicians, policy makers). Participants were identified through EPICC Partners' networks and an advertisement on ResearchGate in 2016/2017. This approach is innovative and novel facilitating true co-production within a community which fostered a sense of identity and genuine shared ownership (McSherry et al., 2020).

4.4. Research process

- April 2017: two-day Multiplier Event, Staffordshire University

Prior to this event, participants were asked to consider implications of the research findings outlined in Tables 1 and 2 for their teaching and learning.

At the event, a summary of the results was presented. Participants then split into groups to (1) discuss the results, (2) share their thoughts on the implications for their practice, and (3) identify actions to take back to their universities to consider in developing their undergraduate curricula. Groups fed back key points in a plenary.

- October/November 2017: five-day Learning, Teaching and Training Event, Viaa University, Netherlands

Participants fed back from their universities and further discussion took place about the barriers/facilitators to spiritual care practice and education.

- September 2018: five-day Learning, Teaching and Training Event, University of Malta

The EPICC Partners compiled a draft Matrix, drawing on the research evidence presented at the April 2017 Multiplier Event (Tables 1 and 2), together with feedback from discussions at that event and the October/November 2017 event. The draft Matrix was emailed to participants ahead of the 2018 event in Malta where it was presented in a plenary. The draft was amended following participant small group and plenary feedback at that event and again via email (which included the accompanying narrative explaining the Matrix). The final version of the Matrix was approved electronically by Participants and is presented here.

5. Results: the EPICC Matrix

The co-produced Matrix is shown in Fig. 1 and is explained below.

There are many definitions of a Matrix. EPICC project Participants felt that the Bing Oxford Languages Dictionary (Bing Oxford Languages Dictionary, n.d.) definition of Matrix was the best fit for undergraduate nursing/midwifery education: "the cultural, social, or political environment in which something develops". The EPICC Matrix aimed to explain: 'The cultural, social and political environment in which SCC develops' in student nurses/midwives. Participants likened this environment to that of the amniotic sac in which a foetus develops, because of the complex and dynamic interplay of personal and external factors.

On the right, the downward blue arrow illustrates the student journey from selection through to registration as a nurse/midwife. The black downward arrow indicates development of SCC over the duration of students' undergraduate studies (Ross et al., 2018).

5.1. Student selection (light blue horizontal arrow)

The way in which student nurses/midwives are selected varies across countries; some select based on academic qualifications only whereas others look for additional caring qualities such as compassion, empathy and warmth. Personal spirituality of students (high personal spirituality scores assessed by SAIL/JAREL is preferable), and their perception of spirituality/spiritual care (being aware of religious and non-religious expressions is preferable) impacts development of perceived SCC. Although students with initial low scores on personal spirituality (SAIL/JAREL) who viewed spirituality in religious terms showed significant improvement in perceived SCC by the end of their studies, they never reached the perceived competency level of students with initial high scores on personal spirituality (SAIL/JAREL) who viewed spirituality more broadly (Ross et al., 2016, 2018). In education programmes where spiritual care competency is important, selecting students based on these additional attributes (personal spirituality and view of spirituality) may be worth considering.

5.2. The environment in which spiritual care competency develops (gold horizontal arrow)

SCC does not develop in isolation. It develops within a complex and dynamic environment which includes:

i) the teaching and learning environment (left hand segment within the gold arrow)

The teaching and learning environment, both in university and in the clinical setting, is crucial to student nurses'/midwives' development of SCC. Students said that having the opportunity to discuss and reflect on their beliefs/values, clinical experiences and life events was important in learning about spiritual care (Ross et al., 2014, 2016, 2018; Ali et al., 2018). Reflection was also important in the clinical area meaning that clinical supervisors/mentors are likely to play a key role (Giske and Cone, 2012) in facilitating student reflection in and on practice (what went well/less well, knowing what's right, and doing what's right in uncertainty [Weeks et al., 2017]), and in balancing art with the science in the provision of holistic person-centred care (Ross and McSherry, 2010). Thus, mandatory structured education seems vital and has been shown to be effective in enhancing SCC (van der Vis-Sietsma et al., 2019).

ii) the student as a person (middle segment within the gold arrow)

As discussed above, personal spirituality is a strong predictor of perceived SCC (Ross et al., 2014, 2016). Experience of personal life events (both positive and negative) may contribute to student learning about spiritual care; it was a factor identified as important by students although it did not feature strongly in statistical analysis (Ross et al.,

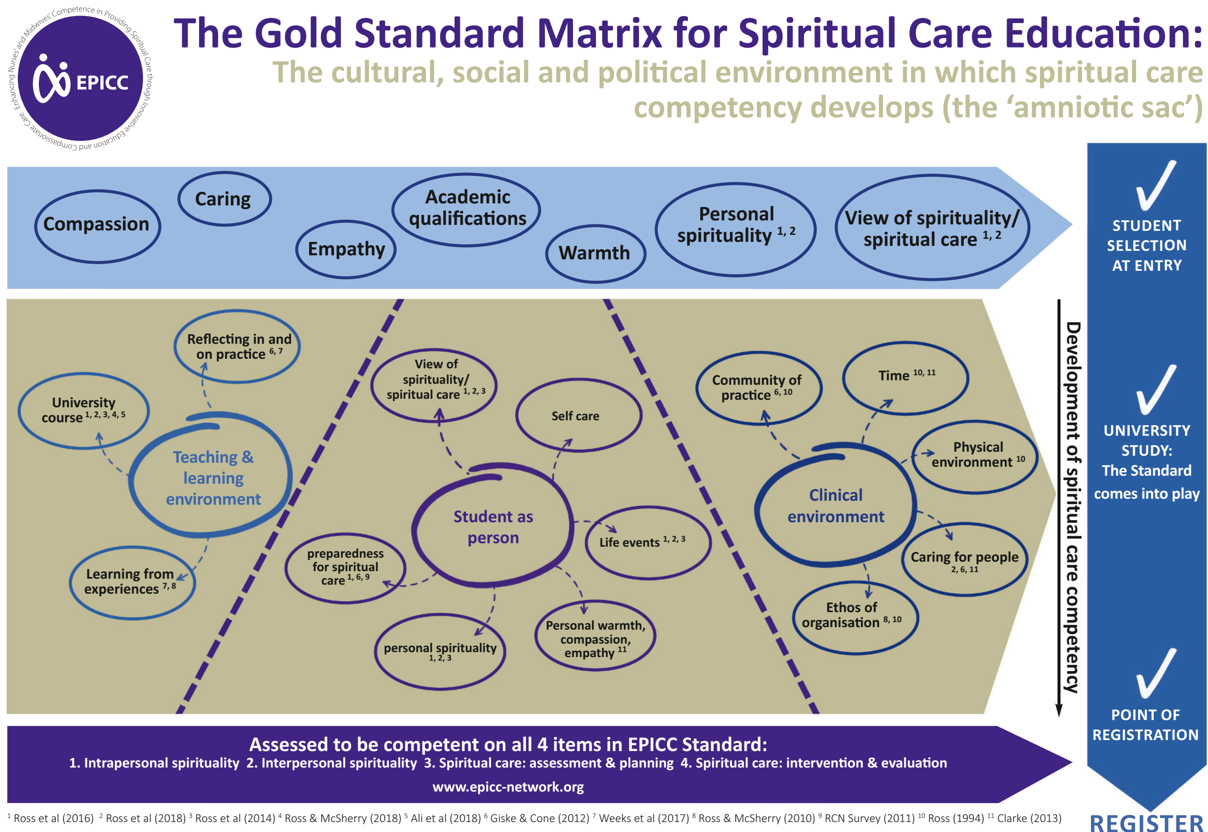


Fig. 1.. EPICC Gold Standard Matrix for Spiritual Care Education.

2018).

Students perceived themselves to be competent in spiritual care by the end of their education (there was a small significant increase from 3.6 to 4 on SCCS in the paired sample of 350 students $p < 0.01$ [Ross et al., 2016]) particularly in more specialized aspects such as 'assessment and implementation' and 'referral', something that many qualified nurses say they lack (Royal College of Nursing, 2011).

Patient studies identify attributes such as personal warmth, compassion and empathy as important prerequisites for spiritual care (Clarke, 2013; Selman et al., 2017; Galutira et al., 2019; Ghorbani et al., 2021).

iii) the clinical environment (right hand segment within the gold arrow)

Many factors influence student nurses'/midwives' SCC development in the clinical environment. Caring for people in clinical practice provides students with real life experiences and helps them to gain a deeper understanding of the complexity of spiritual care (Giske and Cone, 2012; Clarke, 2013; Ross et al., 2014; Ghorbani et al., 2021). However, the leadership style of the clinician in charge (micro level), together with whether practice is task-oriented, or person centred (Ross and McSherry, 2018), may influence the degree to which students feel it is acceptable to provide spiritual care. This ethos may infiltrate through the entire organisation (macro level), affecting whether students feel affirmed or undermined in this aspect of practice. How the wider multi-professional team operates (Ross, 1994), together with good/bad role models (Giske and Cone, 2012) may also impact on SCC development.

The physical environment is important in the provision of spiritual care; for example, a lack of peace, quiet, and privacy may inhibit its provision (Ross, 1994). The clinical environment can be a turbulent and unpredictable place with competing demands and tensions between biomedical (focused on science, 'doing', measurable outcomes) and holistic models (focused on art, 'being', quality of care/patient experience) of practice (Jones et al., 2021). It may be difficult to provide spiritual care in an organisation where the biomedical model prevails.

5.3. Assessed to be competent in spiritual care at point of registration

Before registering, students can be assessed on whether they meet the spiritual care competencies outlined in the EPICC Standard.

5.4. Research since the Matrix was developed

Since developing the Matrix, other research has been published which supports it; this has been integrated throughout this paper (e.g. Selman et al., 2017; Galutira et al., 2019; Ghorbani et al., 2021; Jones et al., 2021). Additionally, we conducted a scoping review of 2128 studies (between January 2009 and May 2020) to identify helpful spiritual care educational strategies and interventions (Rykkje et al., 2021). Findings from the 36 studies meeting our quality appraisal criteria supports key aspects in the Matrix:

- Spiritual care should be mandatory and included in undergraduate curricula to raise awareness, but more research is needed to identify what form that should take; no two educational approaches were the same with great variation in length, content, and delivery (a finding of another systematic review [Jones et al., 2021]).
- Spiritual care content should be threaded throughout the curriculum, not delivered in a 'one off' slot.
- Teaching and learning strategies focusing on self and group-reflection, case discussions and patient simulation are most helpful in fostering development of spiritual caring skills and awareness of spiritual issues.

6. Discussion

The EPICC Matrix provides helpful pointers for nursing/midwifery

educators seeking to ensure that the spiritual care element of their programmes is evidence based.

6.1. Selecting the right students

If the aim is to produce nurses and midwives who are competent in spiritual care as part of holistic care it would seem important that they possess the personal attributes associated with its development, such as personal spiritual awareness and prerequisites to spiritual care such as compassion, warmth and a caring disposition (Selman et al., 2017; Galutira et al., 2019; Ghorbani et al., 2021). The measures of personal spirituality (SAIL, JAREL) used in our research could be included in pre-screening of candidates.

However, there are questions around whether selection based on personal attributes is appropriate, and if so, how it might work in practice.

First, can we afford to be choosy at a time when there is a shortage of nurses and midwives? Should we not just accept all applicants who meet the academic requirements to bolster the diminishing workforce?

Second, it is not clear if better nurses/midwives are produced by universities selecting based on academic qualifications alone compared with those who additionally select on personal attributes. The latter approach is extremely time-consuming involving staff in interviews/group activities with candidates, there is no guarantee of parity across assessments carried out by staff, and candidates can 'perform' in socially desirable ways. Conversely, it could be argued that some form of vetting of personal qualities is needed as a minimum, especially following reports in the UK (Francis, 2013) and Norway (Kuven and Giske, 2015) of poor care standards where many staff lacked these qualities. This would seem particularly important for the nursing profession which is the only professional group to have contact with the patient 24 h per day, 7 days per week. Patient stories, such as those reported in the UK and Norway, highlight the significant difference that compassionate nursing/midwifery care can have on patient experience, wellbeing and outcomes (Sinclair et al., 2016; Jakimowicz et al., 2018). The values-based recruitment (VBR) drive in the UK National Health Service (NHS) is an attempt to ensure that all employees' values align with those of the employer (NHS Employers, n.d.). However, we still do not know what (if any) difference such an approach to recruitment has on patient care. Further research trialling different recruitment approaches for nursing/midwifery students would be helpful.

Additionally, as the provision of spiritual care requires the nurse/midwife to be able to contain and deal with emotions, self-care is also important, as has been acutely highlighted during the COVID-19 pandemic (Schwartz et al., 2021).

6.2. Designing education programmes which develop spiritual care competency

6.2.1. Content

The EPICC Standard provides guidance on course content; it outlines the knowledge, skills and attitudes that are reasonable to expect of students in relation to the four spiritual care competencies. Recent research using a pre-posttest design found that using the EPICC Standard as a framework of reference resulted in 369 nursing students at the University of Alicante, Spain, being better prepared for spiritual care (Fernández-Pascual et al., 2020). Additionally, the EPICC Toolkit provides activities mapped against each competency, which educators could incorporate into their education programmes.

6.2.2. Delivery

The finding that SCC develops over time (Ross et al., 2018) and is enhanced by reflection in and on practice (Cone and Giske, 2013; Galutira et al., 2019; Jones et al., 2021; Rykkje et al., 2021) indicates a threaded approach to delivery. Therefore, small group discussion/reflective sessions based around personal and clinical encounters seems preferable to the traditional 'lead lecture' format, although it may be appropriate to deliver some content in that way. Small group learning may be a challenge with large student cohorts, however the recent move to online learning triggered by COVID-19 has shown that this is possible. For example, small groups can work online and come together for whole group live feedback and 'question and answer' sessions. Some of the authors have found that the quality of the questions and depth of thinking generated by working in this way has been superior to that generated face to face, possibly because students have had time to reflect.

6.3. Creating the right environment for spiritual care competency to flourish

The leadership role models within the teams where students work seem to be crucial in whether spiritual care is seen as a valued part of holistic care or not (Jones et al., 2021). For example, a review of effective spiritual interventions in heart failure identified team leaders as key; they set the tone of care provision determining whether spiritual care is integrated within holistic care or not (Ross and Miles, 2020). Good role models in clinical placements help students to recognise and see how spiritual care can be practised (Giske and Cone, 2012). Students have little control over whether they are supervised by good or bad role models or whether they are placed in supportive or unsupportive teams. However, good role models and supportive teams should eventually prevail when students who have been assessed to be competent in spiritual care become leaders themselves, and if organisations seek to employ people with commensurate values.

An important aspect that is often overlooked in discussions involving spirituality and spiritual care is the transferability of language across different cultures. Emerging evidence suggests that these concepts might mean different things in different regions of the world, for example, in China (Niu et al., 2021), Thailand (Balthip et al., 2017), Japan (Kashio and Becker, 2021), and in indigenous peoples (Sivertsen et al., 2020). Therefore, cultural sensitivity should be considered when discussing these concepts within programmes of nursing and midwifery education and in the delivery of holistic, person-centred care.

Regardless of the ethos of the team within which a student works, spiritual care requires students to contain and deal with emotions. Therefore, developing self-care strategies that work for the individual student is important (EPICC Standard Competency 1). That is why an entire chapter of the EPICC book (McSherry et al., 2021) is devoted to this topic providing 9 reflective exercises and 10 self-care strategies (Schwartz et al., 2021); this text could provide a valuable resource to support curricula.

6.4. Assessing competency

Assessment of the student is a key thread running through the EPICC Matrix triggering two considerations.

First, what should be expected of students at each progression point? This will depend on what works best for each education provider. The four EPICC competencies could be mapped across specific years of the course (e.g. competency 1 with year 1 etc) or they could be addressed in every year with students demonstrating progression from years 1 to 3/4. Within university, students could be assessed on these competencies in traditional exams, assignments, scenarios/case studies and in simulation-based activities across each year, mirroring the threaded approach across the curriculum.

Second, who should carry out the assessment: the student, the university lecturer or the clinical supervisor? It is possible that all three approaches could be appropriate at different times. For example, at the start of the course students could assess themselves, using an adapted validated self-assessment version of the EPICC Standard (Giske et al., 2022), repeating and comparing their results at set progression points. This would support reflective learning and practice. They could also be

assessed by university lecturers as described above and by supervisors in clinical practice. For example, in Wales student nurses are assessed on Competencies 1 and 2 in every clinical placement (up to 18 times across the three-year degree) and on competencies 3 and 4 at each progression point (years 1, 2 and 3) (NHS Wales, no date).

7. Conclusion

This paper has described the development of the EPICC Spiritual Care Education Matrix; an evidence-based figure outlining the complex array of factors which facilitate/hinder the development of SCC in nursing/midwifery students.

The Matrix provides helpful pointers for nursing/midwifery educators/clinical supervisors in selecting the right students, in developing education programmes and in creating the clinical and academic environments conducive to student learning in relation to spiritual care.

The Matrix now needs to be field tested to determine its relevance in different cultural contexts extending beyond Europe where it was developed; it is encouraging that recent research from non-European countries seems to suggest its transferability (Balthip et al., 2017; Galutira et al., 2019; Ghorbani et al., 2021; Jones et al., 2021; Niu et al., 2021). Field testing could be achieved through an online workshop based on the EPICC project principles of action learning and co-production; we invite anyone interested in participating in this way to get in touch with the lead author. The Matrix, as presented in this paper, may need to change following field testing and the emergence of new evidence to ensure that it continues to be fit for purpose.

Further research is needed to address the unanswered questions raised in this paper around whether the methods of selecting nursing/midwifery students make any difference to the type of nurse or midwife produced, and whether some approaches to teaching and learning are more effective than others in supporting SCC development.

Funding

The EPICC project was funded by the European Commission (Erasmus+ KA2 grant agreement number 2016-1-UK01-KA203-024467).

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Acknowledgements

We would like to thank, Tom Ward (Project and Portfolio Coordinator) along with the EPICC Project Participants and Stakeholders.

References

Ali, G., Snowden, M., Wattis, J., Rogers, M., 2018. Spirituality in nursing education: knowledge and practice gaps. IJMCS 5 (1–3), 27–49.

Attard, J., Ross, L., Weeks, K., 2019. Developing a spiritual care competency framework for pre-registration nurses and midwives. Nurse Educ. Pract. 40 https://doi.org/10.1016/j.nepr.2019.07.010.

Attard, J., Ross, L., Weeks, K., 2019. Design and development of a spiritual care competency framework for pre-registration nurses and midwives: a modified Delphi study. Nurse Educ. Pract. 39, 96–104. https://doi.org/10.1016/j.nepr.2019.08.003.

Balthip, S., McSherry, W., Kittikorn, N., 2017. Spirituality and dignity of Thai adolescents living with HIV. Religions 8 (257), 1–18. https://doi.org/10.1007/s11606-009-1052-3.

Bing Oxford Languages Dictionary, n.d.Bing Oxford Languages Dictionary (n.d.) https://www.bing.com/search?q=matrix definition&qs=n&form=QBRE&msbsrank=6_7_0&sp=-1&ghc=1&pq=matrix definition&sc=7-17&sk=&cvid=84E149CA73B54A1B92037A3ECA5D15DF (Accessed 5 April 2022).

Clarke, J., 2013. Spiritual Care in Everyday Nursing Practice. A New Approach. Palgrave Macmillan, Basingstoke.

Cone, P.H., Giske, T., 2013. Teaching spiritual care–a grounded theory study among undergraduate nursing educators. J. Clin. Nurs. 22 (13–14), 1951–1960. https://doi.org/10.1111/j.1365-2702.2012.04203.x.

NHS Employers, n.d.NHS Employers (n.d.) https://www.nhsemployers.org/articles/values-based-recruitment. (Accessed 30 November 2021).

Fernández-Pascual, M., Reig-Ferrer, A., Santos-Ruiz, A., 2020. Effectiveness of an educational intervention to teach spiritual care to Spanish nursing students. Religions 11 (11), 596. https://doi.org/10.3390/rel11110596.

Francis, R., 2013. Mid Staffordshire NHS Foundation Trust Public Inquiry. Crown, London.

Galutira, G.D., Velenzuela, J.P., Basatan, C.J., Castro-Palaganas, E., 2019. Spirituality and spiritual care in nursing: a literature review. Philipp. J. Nurs. 89 (1), 22–31.

Ghorbani, M., Mohammadi, E., Aghabozorgi, R., Ramezani, M., 2021. Spiritual care interventions in nursing: an integrative literature review. Support Care Cancer 29, 1165–1181. https://doi.org/10.1007/s00520-020-05747-9.

Giske, T., Cone, P., 2012. Opening up to learning spiritual care of patients: a grounded theory study of nursing students. J. Clin. Nurs. 21, 2006–2015. https://doi.org/10.1111/j.1365-2702.2011.04054.x.

Giske, T., Schep-Akkerman, A., Bø, B., Cone, P., Kuven, B., McSherry, W., Owusu, B., Ueland, V., Lassche-Scheffer, J., van Leeuwen, R., Ross, L., 2022. Developing and testing a spiritual care competency self-assessment tool for student nurses and midwives. J. Clin. Nurs. https://doi.org/10.1111/jocn.16261.

Hungelmann, J., Kenkel-Rossi, E., Klassen, L., Stollenwerk, R., 1996. Focus on spiritual well-being: harmonious interconnectedness of mind-body-spirit. Use of the JAREL Spiritual Wellbeing Scale. Geriatr Nurs. 262–266. https://doi.org/10.1016/s0197-4572(96)80238-2. November/December.

ICN, 2021. Code of Ethics for Nurses. ICN, Geneva.

Jakimowicz, S., Perry, L., Lewis, J., 2018. Insights on compassion and patient-centred nursing in intensive care: a constructivist grounded theory. J. Clin. Nurs. 21 (7–8), 1559–1611. https://doi.org/10.1111/jocn.14231.

Jones, K.F., Paal, P., Symons, X., Best, M.C., 2021. The content, teaching methods and effectiveness of spiritual care training for health professionals: a mixed methods systematic review. J. Pain Symptom Manag. 62 (3), e261–e278. https://doi.org/10.1016/j.jpainsymman.2021.03.013.

Spirituality as a way. In: Kashio, N., Becker, C. (Eds.), 2021. The Wisdom of Japan. Kyoto University Press/Trans Pacific Press Co., Ltd, Kyoto/Tokyo Japan.

Kuven, B.M., Giske, T., 2015. Ethical dilemmas experienced by nurses when encountering malnourished patients. Nordic J. Nurs. Res. 35 (2), 98–104. https://doi.org/10.1177/0107408315578593.

McSherry, W., Draper, P., Kendrick, D., 2002. Construct validity of a rating scale designed to assess spirituality and spiritual care. Int. J. Nurs. Stud. 39, 723–734. https://doi.org/10.1016/s0020-7489(02)00014-7.

McSherry, W., Ross, L., Attard, J., van Leeuwen, R., Giske, T., Kleiven, T., Boughey, A., Network, E.P.I.C.C., 2020. Preparing undergraduate nurses and midwives for spiritual care: some developments in education over the last decade. J. Study Spiritual. 10 (1), 55–71. https://doi.org/10.1080/20440243.2020.1726053.

McSherry, W., Boughey, A., Attard, J. (Eds.), 2021. Enhancing Nurses' and Midwives' Competence in Providing Spiritual Care: Through Innovative Education and Compassionate Care. Springer Nature AG, Cham.

Meezenbroek, E., Garssen, B., van den Berg, M., 2008. Spiritual Attitude and Involvement List (SAIL). Helen Dowling Institut, Utrecht, Netherlands.

NHS Wales, n.d.NHS Wales (n.d.). All Wales Practice Assessment Document and Ongoing Record of Achievement for Pre-registration Nursing Programmes. https://heiw.nhs.wales/files/once-for-wales/documents/all-wales-practice-assessment-document/. Accessed 30 November 2021.

Niu, Y., McSherry, W., Partridge, M., 2021. Spirituality and spiritual care among ethic Chinese residing in England: implications for nursing. Religions 12, 887. https://doi.org/10.3390/rel12100887.

NMC, 2018. Future Nurse: Standards of Proficiency for Registered Nurses. NMC, London.

Polit, F.P., Beck, T.B., 2012. Nursing Research: Generating and Assessing Evidence for Nursing Practice, 9th ed. Wolters Kluwer Health, Philadelphia.

Ross, L.A., 1994. Spiritual aspects of nursing. J. Adv. Nurs. 19, 439–447. https://doi.org/10.1111/j.1365-2648.1994.tb01105.x.

Ross, L., McSherry, W., 2010. Considerations for the future of spiritual assessment. In: McSherry, W., Ross, L. (Eds.), Spiritual Assessment in Healthcare Practice. M&K Publishing, Keswick, pp. 161–172.

Ross, L., McSherry, W., 2018. The power of two simple questions. Nurs. Stand. 33 (9), 78–80. https://doi.org/10.7748/ns.33.9.78.s22.

Ross, L., Miles, J., 2020. Spirituality in heart failure: a review of the literature from 2014–2019 to identify spiritual care needs and spiritual interventions. Curr. Opin. Support. Palliat. Care. 14 (1), 9–18. https://doi.org/10.1097/SPC.0000000000000475.

Ross, L., van Leeuwen, R., Baldacchino, D., Giske, T., McSherry, W., Narayanasamy, A., Downes, C., Jarvis, P., Schep-Akkerman, A., 2014. Student nurses perceptions of spirituality and competence in delivering spiritual care: a European pilot study. Nurse Educ. Today 34 (5), 697–702. https://doi.org/10.1016/j.nedt.2013.09.014.

Ross, L., Giske, T., van Leeuwen, R., Baldacchino, D., McSherry, W., Narayanasamy, A., Jarvis, P., Schep-Akkerman, A., 2016. Factors contributing to student nurses'/midwives' perceived competency in spiritual care. Nurse Educ. Today 36, 445–451. https://doi.org/10.1016/j.nedt.2015.10.005.

Ross, L., McSherry, W., Giske, T., van Leeuwen, R., Schep-Akkerman, A., Koslander, T., Hall, J., Østergaard Steenfeldt, V., Jarvis, P., 2018. Nursing and midwifery students' perceptions of spirituality, spiritual care, and spiritual care competency: a prospective, longitudinal, correlational European study. Nurse Educ. Today 67, 64–71. https://doi.org/10.1016/j.nedt.2018.05.002.

Royal College of Nursing, 2011. RCN spirituality survey 2010. https://www.rcn.org.uk/professional-development/publications/pub-003861. (Accessed 4 September 2019).
Rykkje, L., Søvik, M.B., Ross, L., McSherry, W., Cone, P., Giske, T., 2021. Educational interventions and strategies for spiritual care in nursing and healthcare students and staff: a scoping review. J. Clin. Nurs. https://doi.org/10.1111/jocn.16067.
Schwartz, A., Baume, K., Snowden, A., Patel, J., Genders, N., Ali, G., 2021. Self-care. Chapter 4. In: McSherry, W., Boughey, A., Attard, J. (Eds.), Enhancing Nurses and Midwives Competence in Providing Spiritual Care through Innovative Education and Compassionate Care. Springer, Cham, pp. 57–74.
Selman, L.E., Brighton, L.J., Sinclair, S., Karvinen, I., Egan, R., Speck, P., Powell, R.A., Deskur-Smielecka, E., Glajchen, M., Adler, S., Puchalski, C., 2017. Patients' and caregivers' needs, experiences, preferences and research priorities in spiritual care: a focus group study across nine countries. Palliat. Med. 32 (1), 216–230. https://doi.org/10.1177/0269216317734954.
Sena, M.A., Damiano, R.F., Lucchetti, G., Peres, M.F.P., 2021. Defining spirituality in healthcare: a systematic review and conceptual framework. Front. Psychol. 12 https://doi.org/10.3389/fpsyg.2021.756080.
Sinclair, S., Norris, J.M., McConnell, S.J., Chocinov, H.M., Hack, T.F., Hagen, N.A., McClement, S., Bouchal, S.R., 2016. Compassion: a scoping review of the healthcare literature. BMC Palliat. Care 15 (6), 1–16. https://doi.org/10.1186/s12904-016-0080-0.
Sivertsen, N., Harrington, A., Hamiduzzaman, M., 2020. Two eyed seeing: the integration of spiritual care in aboriginal residential aged care in South Australia. J. Relig. Spiritual. Aging 32 (2), 149–171. https://doi.org/10.1080/15528030.2019.1669515.
van der Vis-Sietsma, Y., de Man-van Ginkel, J., van Leeuwen, R.R., 2019. The impact of a practice-based educational strategy on the development of spiritual care competencies of nursing students. J. Study Spiritual. 9 (1), 32–48. https://doi.org/10.1080/20440243.2019.1581370.
Van Leeuwen, R., Tiesinga, L.J., Middel, B., Post, D., Jochemsen, H., 2009a. The validity and reliability of an instrument to assess nursing competencies in spiritual care. J. Clin. Nurs. 18 (20), 2857–2869. https://doi.org/10.1111/j.1365-2702.2008.02594.x.
van Leeuwen, R., Attard, J., Ross, L., Boughey, A., Giske, T., Kleiven, T., McSherry, W., 2021. The development of a consensus based standard in spiritual care competencies for undergraduate nurses and midwives. J. Adv. Nurs. 77, 973–986. https://doi.org/10.1111/jan.14613.
Weeks, K., Coben, D., Lum, G., Pontin, D., 2017. Developing nursing competence: future proofing nurses for the changing practice requirements of 21st century healthcare. Nurse Educ. Pract. 27, A3–A4. https://doi.org/10.1016/j.nepr.2017.08.020.