TITLE

Changing attitudes: The impact of Expert by Experience involvement in Mental Health Nursing Education: An international survey study

ABSTRACT

Reform to nursing education is essential to ensure future generations of nurses are strongly positioned to value, know and deliver strengths-based, recovery-oriented mental health practice. A promising pathway to effectively drive reform is the co-production of curricula by nursing academics and people with lived experience of recovery from mental distress referred to as Experts by Experience. The Co-production in Mental Health Nursing Education project (COMMUNE) is an international collaboration for development and implementation of consumer co-produced curricula. This study evaluated the inclusion of Expert by Experience-led mental health nursing education on nursing students' attitudes to people labelled with mental illness, mental health nursing and consumer participation. A repeated self-report measures design was implemented in Australia, Ireland, and Finland to ascertain level of generalisability of consumer involvement within undergraduate nursing programs. Data were collected from nursing students (N= 194) immediately before and after the education module, using three self-report instruments on attitudes (Mental Health Nurse Education Survey, Consumer Participation Questionnaire, and Opening Minds Survey). Data were analysed using

descriptive and inferential statistics. Eighty-nine per cent of the 27 points of change reflected more favourable and accepting attitudinal change. Of these, 41% were significant at Bonferroni adjusted alpha of .0025. There was a statistically significant increase in preparedness for practice in the mental health field in each of the three countries. The most pronounced change is related to the social and systemic inclusion of people with a diagnostic label and recovery-oriented care more broadly.

Key words: mental health nursing; nursing education; mental health; consumer participation, service user participation; co-production.

Introduction

There is increasing recognition of the value of first-hand experiential knowledge in more positively effecting health services and health education and producing better quality and more relevant research (Stratford *et al.*, 2016, Weise *et al.*, 2018, National Health and Medical Research Council, 2016, Commonwealth of Australia, 2017, Department of Health and Children, 2006, Health Service Executive, 2017, Ministry of Social Affairs and Health, 2016). This goal is reflected in diverse initiatives to strengthen the presence and contribution of people with first-hand experience of recovery from mental illness and mental health service use (Michalak *et al.*, 2016, Veseth *et al.*, 2017, Rose, 2017) in consultation, decision-making and shaping of health services and research. The Coproduced Mental Health Nursing Education (COMMUNE) project opted to use the term 'Experts by Experience' (EBE) to describe the team members who brought this specific expertise to the team, as opposed to knowledge gleaned from professional or academic endeavours.

Background

Service user participation in mental health services is often limited by tokenism, a powerful resister to meaningful change (Paul &Holt, 2017). More substantive and meaningful participation is emerging, with a movement

towards co-production (INVOLVE, 2017, Vaeggemose *et al.*, 2018, Department of Health and Children, 2006). Co-production, in this context, is characterised by consumers and health professionals in practice or educational settings, collaborating in partnership on projects featuring equitable power relations between, and relationships founded on, trust and mutuality (Gill, 2018). Co-productive modalities of work are increasingly promoted in research (Chambers *et al.*, 2017), mental health service delivery (Roper *et al.*, 2018, Lwembe *et al.*, 2017), and education (Manning *et al.*, 2017).

Contemporary policy and clinical standards places significant demands on those entering the nursing workforce to be familiar with, value and use recovery-focused mental health nursing practice (Happell *et al.*, 2017). For instance, despite much discourse on recovery, mental health nursing in practice often remains "impersonal, custody and containment focused" (Cutcliffe *et al.*, 2013, p. A4) as the newer philosophy is at odds with expectations of risk management. At the same time, negative attitudes and stigma towards people with mental illness prevail at a population level (Angermeyer &Dietrich, 2006, Schomerus *et al.*, 2012, Roskar *et al.*, 2017).

In addressing educational and workforce demands, EBE-driven mental health curricula may be particularly effective, as EBEs are best placed to inform and lead engaged discussion on symptoms and treatments for 'mental illness' and enablers of recovery (Byrne *et al.*, 2013b, Happell et al.,

2017, Poreddi *et al.*, 2016). An increase in lived experience perspectives in nursing education is evident in some countries (McCann *et al.*, 2009, Happell *et al.*, 2015, Felton *et al.*, 2018), however this involvement is often ad hoc, minimal and often restricted to the telling of story (Happell &Bennetts, 2016). In contrast, the COMMUNE approach facilitates students' ability to develop more critical analysis of preconceptions of people with a clinical label of mental illness (Happell *et al.*, 2014b). However, of perhaps greater significance, is the gradual emergence of EBEs having roles within nursing education which extends to the development, implementation and evaluation of curricula (Horgan *et al.*, 2018). The preliminary body of quantitative and qualitative studies available suggest that nursing education delivered and designed by EBE may be a catalyst for positive changes in nursing students' attitudes and beliefs in relation to people with mental diagnoses (Byrne et al., 2013b, Schneebeli *et al.*, 2010), including their active participation in mental health services and education (Byrne *et al.*, 2014).

The need for more attention to EBE involvement in the education of nurses raises questions about movements in this direction on a global scale, especially given the high priority of mental health internationally (World Health Organization, 2017). Occurrence of EBE or mental health consumer-(co)led roles in education, research and health professional practice is quite uneven internationally (Byrne *et al.*, 2018). For instance, it has been suggested that developing economies (such as in South-East Asia and South America) have fewer lived experience roles than OECD countries such as Australia

and New Zealand (Byrne et al., 2018), Western Europe (Rose, 2015, Rose *et al.*, 2016, Staley *et al.*, 2013), and the USA and Canada (Cronise *et al.*, 2016).

There is a growing body of evidence that EBEs in nursing education create a positive impact. , This, coupled with the apparent underutilisation of this approach, indicates it is timely to consider co-produced nursing education *as a principle;* as a means of promoting more effective learning of person-centred and recovery-based mental health nursing. Research is needed on (1) actual implementation of co-produced curricula and its delivery, and (2) the extent to which the principle may be demonstrated across undergraduate settings in different countries to evaluate the broad applicability of such an educational principle.

This paper reports on findings from an innovative international project which co-produced a mental health nursing module for undergraduate nursing students. COMMUNE involved co-leadership of both the project itself and the curriculum development process. The unique partnership comprised Experts by Experience by EBE and mental health nurse academics in Australia and Western Europe (Horgan et al., 2018).

Universities across six countries, (Australia, Ireland, Finland, Norway, the Netherlands and Iceland), came together to develop the module learning outcomes based on the themed data from service user focus groups held at each site. The innovative methodology used a consensus process to

capture these themes into learning outcomes. At the implementation stage, one or more EBE collaborated with nurse academics to deliver the new curricula in the classroom. The COMMUNE module required students to critically reflect on their thoughts and feelings towards people labelled with mental illness, diagnostic categories and recovery concepts; and engage in dialogue with an EBE educator throughout this process (Horgan et al., 2018). All project phases followed the principles of co-production as much as possible, from starting with conception and grant funding application to design and implementation. Now at the latter stages, COMMUNE members conducted pre-post studies of student nurse attitude change to ascertain the level of impact of EBE teaching. It was hypothesised that the education would have broad-based positive influence on student attitudes, i.e. about mental illness as a construct, systemic involvement of lived experience in health education, and the value of high quality nursing practice.

Aim

To evaluate the impact of EBE co-produced nursing education, and explore as an internationally applicable principle for positively impacting student attitudes towards people with mental illness, consumer participation and recovery-oriented nursing care.

Methods

Design

The research approach involved repeated-measures, employing self-report instruments targeting an array of attitudes about people with a label of mental illness, service user participation in services and education, and the value of mental health nursing practice across each of the research sites.

Participants and setting

The study was undertaken in six countries; Iceland, Netherlands, Norway, Finland, Ireland and Australia, however due to the poor return rate at some universities, insufficient post-test questionnaires were available for data analysis and were excluded from the presentation of findings. This paper reports findings from four research sites; Australia, Finland and Ireland (two Universities). All settings offered the co-produced EBE module yet their context slightly differed. A background to the uniqueness of each context will now be outlined; such as course length, timing of module in the degree, scope of nursing degree and type of university.

Australia

Students completing their three-year undergraduate nursing program are legally entitled to practice across a range of healthcare settings. Graduates do not have specialist skills in mental health nursing. The COMMUNE module was part of a final unit prior to registration.

Ireland

Ireland was represented by two universities. The samples were considered sufficiently similar in structure, content and philosophy for the results to be combined to comprise a single study. In Ireland, students complete a four-year degree specialist mental health nursing program, leading to registration with the Nursing and Midwifery Board of Ireland (NMBI) as a mental health nurse.

Finland

Similar to Australia, nursing studies are generic and include core and professional studies and practical training. Nurse education covers all specialist fields over a three and a half year period. Successful students graduate with Bachelor of Health Care in Nursing and are registered as general nurses.

Ethical considerations

All studies were approved by the university-based research ethics committees at each site. Nursing students were invited verbally to participate by a member of the team and provided an information sheet on the project, detailing the research purposes, nature of participation and measures to ensure confidentiality. Participants were informed that participation in the research was voluntary and only members of the COMMUNE project would have access to the data. No names would be used in any reporting to preserve student confidentiality.

As a result of different research ethics policies at each university, there were some differences in anonymity protection processes across the sites. . In Australia and Finland, student names were recorded for purposes only of matching surveys at both time points. Participant names were not recorded for the Irish Universities. These students were allocated unique numerical identifiers, for matching of pre and post surveys.

Data collection

Hard copy versions of the self-report measures were administered in person in a group format (e.g. during classes) before commencement of the mental health module. Soon after completion of a module, the same measures were

applied for a second time. In terms of attrition, there were 88.1% retained from baseline in Ireland, 59.8% retained from baseline in Australia, and 94.2% retained from baseline in Finland.

Data collection instruments

Three self-report measures were selected to provide a comprehensive, multi-domain measurement of nursing students' attitudes that may benefit from co-produced education.

The Mental Health Nurse Education Survey, MHNES (Happell &Hayman-White, 2009) reports attitudes and beliefs towards people diagnosed with mental illness and towards mental health care. Participants are asked to respond via a seven-point scale ranging from "strongly disagree" on the left, to "strongly agree" on the right. For attitudes towards people with a mental illness diagnosis the scale was:

- *Negative stereotypes*, such as the notion that people with mental illness are dangerous (e.g. 'People with mental illness are more likely to be violent').

In relation to mental health care such as mental health nursing, the scales utilised were:

- *Valuable contribution*, referring to the extent to which mental health services and nursing make a positive difference to consumers (e.g. 'Psychiatric/mental health nursing can assist people with a mental illness in their recovery')
- *Preparedness for mental health field*, such as perceived understanding of mental health nurse roles (e.g. 'I feel confident in my ability to care for people experiencing a mental health problem').

Brief student demographic information (gender, age) was collated via the final section of the Mental Health Nurse Education Survey.

The Health Care version of the Opening Minds Scale (OMS) (Modgill *et al.*, 2014) measures beliefs and attitudes towards oneself and others regarding mental illness. This measure has been successfully applied the evaluation of Canadian anti-stigma programs targeting health care practitioners, including nurses (Kassam *et al.*, 2012). Statements are rated on a scale from 1 to 5 on level of (dis)agreement. The three scales considered for change analysis were:

- *Social distancing* (e.g. 'If a colleague with whom I work with told me they had a managed mental illness, I would be as willing to work with him/her'; reverse scored). Modgill et al. (2014) describe the *Social Distancing* scale as "measuring a willingness to readily engage persons with mental illness in various activities and relationships" (p. 2).

- *Disclosure/help-seeking* (e.g. 'I would see myself as weak if I had a mental illness and could not fix it myself')
- *Attitudes to Mental* Illness (e.g. 'There is little I can do to help people with a mental illness').

The Consumer Participation Questionnaire, CPQ (Happell *et al.*, 2010) focuses on views on the need and importance of consumer involvement in health care services and in training health care providers. Attitudinal statements are rated on a range of 1 to 7, with 'strongly disagree' and 'strongly agree' at each end point. The scales and example items are presented below:

- *Consumer involvement* (e.g. 'Consumers should have the opportunity for genuine input into the planning of their own treatment').
- *Lack of capacity* (e.g. 'People with mental illness can't handle too much responsibility').
- *Sufficiency of services* (e.g. 'Mental health services work as well as they can and we shouldn't use valuable resources trying to change them').
- *Consumer academic* (e.g. 'A consumer academic should be a member of staff in all mental health/psychiatric nursing courses).
- *Consumer as staff* (e.g. 'Consumers should be involved in the process for the hiring of all new staff of mental health services').

Analytic approach

The main analysis involved descriptive statistics (means, standard deviation) and within-subjects (dependent measures) t-tests to evaluate whether attitudinal changes were statistically significant. These statistics were conducted in version 25 of the SPSS (IBM, 2017, Chicago, IL, USA). Given several tests were to take place, Bonferroni adjusted alpha was applied to manage the likelihood of Type I errors. As described in Section 3.2, the number of tests was calculated after first examining how many scales were retained, based on sound internal reliability, as defined by Cronbach (1951).

Effect sizes were calculated via the psychometrica website (Lenhard &Lendhard, 2016), which uses a formula for Cohen's *d* that takes into account the correlation between pre- and post- scores. Size of effect was based on commonly applied criteria (Cohen, 1992): .1 'small', .3 'medium' and .5 and over 'large'.

Preliminary analyses for establishing the scale scores for evaluation of attitudinal change were underpinned by two measurement theories: classical test theory and the Rasch approach to latent variable models (Hagquist *et al.*, 2009). The aim was to ensure each scale score was unidimensional, to check reliability levels and to ensure variables were the appropriate type for repeated measures t-tests (continuous variables). Accordingly, baseline data for validity and reliability of the three self-report measures (CPQ, MHNES and

OMS) were evaluated via either principal component analysis, exploratory or confirmatory factor analysis (depending on the level of previous psychometric knowledge about each instrument) and Rasch modelling. These analyses broadly indicated good construct validity for slightly refined sets of items for the respective scales for all three instruments. Details of these analytic results will be reported elsewhere (please contact authors for findings of these preliminary analyses and rescore protocols for each of the measures). In preparation for t-tests, item responses for each construct were summed and converted to Rasch scores on a scale from 0 to 100. For Rasch scores and relevant item responses, the percentage of missing data was very low in each sub-sample, ranging from 0% to 5%. For t-tests, cases were excluded listwise.

Results

Sample demographics

In each sample over 83% of the students were female (Australia 84.7%, Ireland 85.1% and Finland 83.1%). The majority of the participants were aged between 18 and 29 (Australia 84.7%, Ireland 86.6% and Finland 83.1%). Most of the remaining participants in Australia and Ireland and all other participants in Finland were aged between 30 and 39.

Reliability analysis and preparation for testing for changes in attitudes

Table 1 presents the internal consistency levels (reliability by Cronbach alpha) for participants for whom both pre and post data was available. Reliabilities ranged from .52 to .70 for the MHNES, between .39 and .79 for the OMS, and .54 to .70 for the CPQ. Given the very low reliability levels for the Disclosure and Attitude scales of the OMS for all three studies, the scores for these were not retained for pre-post analysis. This left 9 t-tests to be conducted for each study. The Bonferroni revision of the cut-off value for one-tailed tests (.025) was made, setting the alpha at .0027.

[Insert Table 1 about here]

Australia

Table 2 presents the means, standard deviations, mean standard errors and t-test results for Australian students. At the pre-course stage, noting the range of scores was from 0 to 100, there were 'high' average levels for attitudes that mental health nursing makes a positive contribution (around 89), for consumer involvement in services and education (around 77) and the importance of consumer academics (around 71). Average Rasch scores are highlighted in bold. Apart from two scales on consumer participation (lack of

capacity and consumer academic) mean levels trended in positive directions. Statistically significant change was observed for Social Distancing (less self-reported distancing) and Preparedness for Mental Health field (increased preparedness). Compared to 'baseline' pre-course levels, sense of preparedness went up by 17%.

[Insert Table 2 about here]

Ireland

Table 3 presents descriptive and inferential statistics for students in Ireland. Apart from the view that services are sufficient without consumer involvement, trend-wise, there were positive mean score changes from pre to post (i.e. increases in positive attitudes and decreases in negative attitudes). Statistically significant changes were observed for Negative stereotypes, preparedness for mental health field, and consumer involvement. Percentage changes in the mean for these scales was 20%, 10% and 9% respectively.

[Insert Table 3 about here]

Finland

Table 4 presents the descriptive statistics (e.g. means) and t-test parameters for students in Finland. Examining mean scores, self-reported attitudes went in positive directions for all nine domains. For instance, negative stereotypes dropped by 23%, and this was a statistically significant change. Statistical significance was also found for social distancing, preparedness for mental health field, and some scales of the CPQ (consumer involvement, lack of capacity and consumer as staff).

[Insert Table 4 about here]

Comparison of attitudinal change across countries

Table 5 presents the overall pattern of statistically significant changes by attitude domain for the three countries, accompanied by effect size estimates. Of the 27 assessments of change across the program, eleven cases of statistical significance (40.7%) were observed. The greatest coverage of change across scales tended to be for Finland, where change was noted for more than half of the scales. Student sense of preparedness for the mental health field received high effect sizes in all three countries. Moderate to high magnitude effects were also found across countries for reductions in negative stereotypes and social distancing. In terms of attitudes

to consumer participation in services and education, a high effect size was observed for consumer as staff in Ireland, and moderate effect for consumer involvement in Ireland and Finland.

[insert Table 5 about here]

4. Discussion

Given the mental health care needs of populations internationally (World Health Organisation, 2013), there is a clear demand for highly qualified and skilled nursing workforces equipped to provide holistic, recovery-focused and therapeutic mental health nursing practice across a broad range of settings (Delaney, 2016). The findings of this study suggest that Experts by Experience have an important contribution to make in positively influencing nursing students' attitudes to mental illness, consumer participation and mental health nursing. This finding supports similar studies found in the broader nursing and clinical literature. (Schneebeli et al., 2010, Scammell *et al.*, 2016, O' Donnell &Gormley, 2013, Happell et al., 2015, Byrne et al., 2014, Happell *et al.*, 2014a, Arblaster *et al.*, 2015, Ridley *et al.*, 2017, Mahboub &Milbourn, 2015).

The involvement of EBE in nursing education was noted to be limited and often ad hoc (McCann et al., 2009, Happell et al., 2015), and therefore an underutilised resource. Co-produced nursing education as a principle

reflects contemporary mental health policy (Commonwealth of Australia, 2017) and presents a potentially highly effective way to prepare nurses to provide high quality mental health care and attract more nurses to the mental health sector (Horgan et al., 2018, Schneebeli et al., 2010, Byrne *et al.*, 2013a). The cross country nature of the current research program suggests both the salience and subsequent international relevance of these findings.

Changing negative attitudes towards people labelled with mental illness has been an area of extensive efforts targeting health professionals, health care trainees and the broader public, and has been found to be a challenging task (Dabby *et al.*, 2015, Modgill et al., 2014, Schomerus et al., 2012, Simmons *et al.*, 2017). Building on previous studies reporting on nursing student attitudes (Bingham &O'Brien, 2018, Happell et al., 2014b), this paper provides further evidence for positive reduction in negative stereotypes which can be achieved via co-produced curricula with delivery by lived experience educators (EBE). Most notably, statistically significant and high effect reductions in negative stereotypes were observed in Ireland and Finland. Considering the more behaviourally based attitude of social distancing (Modgill et al., 2014), in the current research, moderate and statistically significant reductions in self-reported distancing were observed for Australia and Finland.

Demand for mental health services (Collins &Saxena, 2016, Betancourt &Chambers, 2016) and prevalence of mental illness throughout the health

care system is high (Williams &Manning, 2008, Jayatilleke *et al.*, 2018). A fundamental goal of undergraduate nursing education is that students see themselves as well prepared for working with people experiencing mental distress; in any clinical setting. The current findings demonstrate that EBE involvement increased students' perceived preparedness for mental health nursing practice across all three sites (Australia, Ireland and Finland). Similar findings were reported previously in one country (Australia) (Happell et al., 2014b), yet this is the first known study to encompass three countries. In light of the paucity of research addressing the role of EBE in influencing attitudes towards mental health nursing as a career, these findings make an important contribution and signal the need for further research.

For domains of attitudes tied to consumer participation, the most consistent changes were for views about involvement of consumers in their own treatment and diagnosis, and for input on services in general. However, aside from Finland, there were no statistically significant changes on other aspects of consumer participation, such as the capacity of consumers and higher-level modalities of participation, such as contributing to decision-making in the hiring of staff and training of staff. In Australia-based research, this is in contrast to an earlier study (Byrne et al., 2014) where there were improvements via EBE-led education in lack of capacity and consumer as staff.

Less change being evident for more embedded forms of consumer participation is consistent with the few earlier studies that have used the CPQ. For instance, a study in Bangalore, India, found "mixed" support for the notion of consumer as staff (Poreddi et al., 2016). While in this study there were relatively high levels of agreement with the importance of a consumer academic in all three countries (over 68 out of 100 in Tables 3 to 5), it appears students hold exclusionary views towards other forms of higher level participation, particularly regarding consumers as staff in mental health services. These perspectives seem to be resistant to change. Efforts may need to be intensified reinforce to students the merits of higher level forms of consumer participation, to bring in line with contemporary mental health policy directions.

The Finnish data, demonstrated the largest number of significant changes in attitudes. This may reflect the newness and lack of consistency in consumer participation in Finland. This might also reflect the lack of clear policy direction on co-production, and consumer involvement in mental health practice and education in comparison with Ireland and Australia where a number of national policy documents have been published in this area.

Through the uniformity of research design across these country-based studies, the Commune program enabled robust evaluation of EBE involvement in mental health nursing education. As research about lived

experience involvement in the higher education sector has been disparate and hence difficult to systematically compare (Happell et al., 2014a), this is a significant advance. The design was also strong in terms of reach, by covering a wide range of attitudinal domains (people with mental illness, consumer participation and mental health care). Overall, we have provided some evidence for the efficacy of co-produced education, particularly relevant for education of nurses in Western university settings.

Limitations

A limitation of the design was the absence of a comparison group to increase confidence that attitudinal changes were solely attributable to the EBE-directed education. Ideally, an enhancement on the current approach would be inclusion of a control group of students receiving 'education as usual' (e.g. non-consumer 'traditional' instruction in mental health). In the case of this project, having a comparison group was not feasible as there was a need to maximise sample sizes, especially for the smaller Ireland-based student cohorts. Furthermore, it would have been impractical to implement a quasi-experimental arrangement given the complexity of logistics of undergraduate nursing programs.

A further limitation was that reliability levels of the self-report measures were not always at a high level to optimise evaluation of attitudinal change.

As seen in Table 1, two scales of the OMS had poor reliability and so had to be excluded from the main analyses (t-tests). The questionable reliability of self-report measures regarding attitudes to mental illness has been an ongoing challenge in research (Wei *et al.*, 2015). There is a need for improving the internal consistency of this important group of measures to further establish the evidence-base on lived experience perspectives as an adjunct to mental health education.

Relevance for clinical practice

Contemporary mental health policy calls for recovery-focused mental health services which acknowledge consumers as key stakeholders in the design, delivery, implementation and evaluation of services. Nurses with the skills, knowledge and attitudes to work collaboratively with consumers are essential to achieving these goals. Consumer involvement in professional education has been identified as an effective strategy in facilitating attitudes required in the nursing workforce and prompting interest in mental health nursing as a career. The Commune project has demonstrated positive changes in attitudes to people with mental illness, consumer participation and mental health nursing as a career. These positive findings suggest consumer involvement should be integral to quality mental health nursing education.

Conclusions

EBEs, through leadership and co-production activities, are increasingly contributing to innovation in nursing pedagogy. Participation can simultaneously benefit people with a mental health diagnosis, plus emerging nurses and their future patients. Students felt more prepared to work professionally in mental health sectors, potentially mitigating future workforce shortages. The tri-country-based setting within the current international collaboration program (COMMUNE) provides further evidence that co-produced nursing education is applicable internationally; as a principle and practice. It provides a unique learning platform for shifting stigmatised attitudes and preparing students to offer high quality mental health nursing practice.

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