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Title of paper**SERVICE USER INVOLVEMENT IN PRE-REGISTRATION GENERAL NURSE EDUCATION: A SYSTEMATIC REVIEW****Abstract**

Aims and objectives: A systematic review of published studies on service user involvement in undergraduate, pre-registration general nursing education (excluding mental health-specific programmes). The objective is to examine how students are exposed to engagement with service users.

Background: The requirement of service user involvement in all nurse education is policy expectation of health professional education providers, in response to the increased public and political expectations. Previous literature reviews have focused solely on mental health.

Design: Systematic review using the PRISMA guidelines; timeframe 1997-2014; published in English.

Methods: Search of CINAHL, Cochrane Review, Education Research Complete, Internurse, MEDLINE, PsychINFO, Scopus, SocINDEX and Web of Science yielded 229 citations; 11 studies met the review eligibility criteria.

Results: Seven studies used qualitative methodology, two quantitative and two mixed methods. Studies from the United Kingdom dominated (n=9), the remainder from South Africa and Turkey. The results are described using four themes: benefits and limitations of service user involvement; nursing student selection; education delivery; practice-based learning and assessment. Most studies were small scale; nine had less than 30 participants. Overall the evidence suggests that student, lecturers and service users valued service user involvement in nurse education, to provide an authentic insight into the illness experience. Logistical considerations around support and student cohort size emerged.

Conclusions: This is the first systematic review to focus on service user involvement in general nurse education. It reveals that service user involvement commenced later and is more limited in general programmes as compared to equivalent mental health education provision. Most of the evidence focuses on perceptions of the value of involvement. Further research is required to more clearly establish impact on learning and clinical practice.

Relevance to clinical practice: service user involvement in nurse education is valued by stakeholders but preparation and support for those involved, including mentors is underestimated.

Summary box: What does the paper contribute to the wider global community?

- The first systematic review of service user involvement in non-mental health specific pre-registration nurse education
- Students, lecturers and service users value service user involvement in nurse education
- There is a need for further larger-scale, multi-centred mixed method research around impact on learning and person-centred care

Keywords: Pre-registration; nursing; education; service users; systematic literature review

INTRODUCTION

Service user involvement in health and social care education has become a key imperative internationally, largely in response to increased public and political expectation that user voice is prominent in the on-going design and monitoring of care services. It could be argued that the ultimate goal of service-user involvement in nurse education is to influence the practice of person-centred care (Happell *et al.* 2011; Rhodes 2012). In the United Kingdom (UK), 'hearing' the patients' voice is viewed by policy-makers as a means to prevent failings in health care quality (Francis 2013) through involvement in service development and delivery (Department of Health (DoH) 2008; 2005). This commitment has been endorsed within National Health Service (NHS) Constitution and government strategy for modernising the NHS (DoH 2010), which stress the principle of shared decision-making. Similarly international evidence (Fremont *et al.* 2001) attests to the value of service user engagement in service planning, delivery and quality, recognising that service users are best placed to judge their experiences, and support preparation of health and social care professionals (Bennett & Baikie; Debyser *et al.* 2011; DeMarco 2010).

Within the literature care recipients are referred to using various terms. *Service user* refers to individual(s) who use health or social care services; *carers* are defined as 'individuals who provide care for others on an unpaid basis' (Fallon *et al.* 2012:128). Both groups can be involved in the education of health and social care professionals. In this paper, the term service users will be used and should be read to include carers.

Rhodes (2012) highlights that medicine and social work has dominated the landscape regarding user involvement in practitioner education. Within nurse education, engagement with service users is most established in mental health, following long-standing policy recommendations in the UK (DoH 1994) and internationally (Happell *et al.* 2011) that service users should be involved in delivery of mental health nurse education programmes. More recently, this imperative has extended to embrace the wider remit of all pre-registration nurse preparatory programmes. As Happell *et al.* (2011) argue there are many benefits, including that service user participation can usefully challenge the traditional power base apparent in much health professional education, which tends to privilege clinical perspective over individual experience. The regulatory body for nursing in the UK (Nursing and Midwifery Council (NMC) 2010) demand that education providers demonstrate how

service users contribute to programme design and delivery. This trend is mirrored internationally, for example in Turkey (Duygulu and Abaan 2013), Australia (Happell *et al.* 2011), Canada (Bennett and Baikie), Belgium (Debyser *et al.* 2011), USA (DeMarco 2010) and South Africa (Mathibe 2007).

The majority of literature concerning service user involvement in education focuses on mental health. Topics include the role of service users as educators in classroom settings (Bennett and Baikie 2003), as assessors of students (Debyser *et al.* 2011) and curriculum development (Forrest *et al.* 2000). Three recent literature reviews focused on mental health service user involvement. Terry (2012) reviewed service user involvement in pre-registration mental health nurse education programmes, concentrating specifically on engagement within the classroom setting. This review included eight papers (four empirical studies and four review papers). Terry identified that a range of learning and teaching strategies were used and concluded that further longitudinal research was needed to establish the impact of classroom initiatives over time.

Perry *et al.* (2013) explored service user involvement in teaching interpersonal skills to mental health nursing students. This systematic review included ten studies and concluded that involvement in teaching communication skills was valued and led to improved attitudes towards people with mental health issues. However the review also identified that some students were concerned whether service users' views were sufficiently objective. Happell *et al.* (2014) examined consumer involvement in the education of mental health professionals including psychiatrists, nurses, psychologists, social workers and occupational therapists. This review included 30 studies; the findings indicated that service user involvement in education of mental health professionals was limited and variable across different professional groups.

To summarise, the literature indicates that mental health nurse education providers' engagement with service user groups is relatively well developed in some countries. In contrast relatively little attention appears to have been paid to service user involvement in general (non-mental health specific) nursing education. In some countries such as the UK (NMC 2010), nursing students can specialise at pre-registration level in mental health, adult, child health or learning disability nursing throughout their programme. More typically nurse preparatory programmes involve a three or four year course of study leading to generic registered nurse status (for example: Australian Nursing and Midwifery Accreditation Council 2015; European

Union (World Health Organisation 2009). Nonetheless whilst cognisant of experiences from the mental health domain, it seems pertinent to investigate the extent of service user involvement related to other fields of preparatory nurse education.

METHODS

The research question that guided this review was: *To what extent are service users involved in pre-registration general nurse education?* The aim is to provide a systematic review of published studies on service user involvement in the education of undergraduate, pre-registration nursing students, excluding mental health. The objective is to examine how pre-registration nursing students are exposed to engagement with service users during their professional education and the nature of this engagement.

Eligibility criteria

The PRISMA (Preferred Reporting Items for Systematic reviews and Meta-Analyses) checklist (Liberati *et al.* 2009) informed the execution and reporting of this search and an author-adapted version of the PICO Framework (Bettany-Saltikov 2012) provided the scaffold for an effective search strategy. Details of integral population, interventions, comparators and outcomes appear in Table 1 and the eligibility screening process is outlined in Table 2.

Type of study

This review included only empirical papers described as research or evaluation, focussing on studies with recognisable and replicable research methodologies. Quantitative, qualitative and mixed method studies were included. Editorials, commentaries, initiatives and papers with poorly evidenced analysis were omitted.

Search strategy

Two searches were conducted using mySearch, Bournemouth University's iteration of the EBSCO Discovery Service (EDS) tool [EC]. This enabled the simultaneous and systematic searching of multiple bibliographic databases, including CINAHL, Cochrane Review, Education Research Complete, Internurse, MEDLINE, PsychINFO, Scopus, SocINDEX and Web of Science. The review was based on

research published from 1997 onwards as an initial literature search identified no relevant papers had been published prior to that date. Searches were limited to English language studies and focussed on peer-reviewed literature. Strategies for both searches are provided in Appendix 1. The last execution of the search was performed on 6th June 2014. Additional studies were identified through hand searching and snowballing i.e. reviewing reference lists of papers included in the review.

Screening and Selection

Papers were selected using a two stage screening process (Figure 1). At Stage 1 titles and abstracts were screened [JS, VH] against pre-determined inclusion and exclusion criteria to ensure match and relevancy (Table 2). Papers considered not relevant on grounds of intervention (no service user involvement in nurse education) or population (not involving general pre-registration nursing students) were excluded. This sometimes necessitated a full text review. As recommended by Centre for Reviews and Dissemination (2009) guidelines, at Stage 2 the full text of each paper was separately reviewed for inclusion by two researchers [JS, VH] to validate judgements and to minimise the possibility of researcher bias. Data was extracted using a structured format and any disagreements were resolved through discussion and arbitration with third researcher [EC]. Two tables were developed, piloted and refined accordingly [EC] to enable accurate recording and evaluation of data extracted from the papers at each stage. Two critical appraisal tools (Critical Appraisal Skills Programme (CASP) 2013 and Moule *et al.* 2003) were utilised to assess qualitative, and quantitative and mixed method papers respectively [JS, VH]. A content analysis of included papers [JS, VH] enabled extraction of common themes around nature of service user involvement; findings were compared and discussed with the third researcher [EC]. Four themes emerged, providing a framework to structure results: Benefits and limitations of service user involvement; Service user involvement in nursing student selection; Forms of service user involvement in education delivery; Service user involvement in practice-based learning and assessment.

RESULTS

A total of 279 records were retrieved through two initial searches and screened for relevance (Figure 1). 235 were excluded at Stage 1 through duplication, not being focussed on pre-registration nurses and no discernible evidence of service user engagement. The 44 remaining full text papers plus another 5 identified through hand searching and snowballing (n=49) were then assessed against inclusion criteria at Stage 2, resulting in 36 being excluded, mainly due to focus on mental health nursing and non-empirical nature of paper. Finally 11 papers (4.6% of all citations) were selected for review. Results are described by study characteristics and findings (Table 3). Using the data extraction procedure described above, two researchers [JS, VH] used a process of content analysis (Greenheim and Lundman, 2004) to review the final selection of papers. Following comparison and discussion with the third researcher [EC], results were grouped into four themes.

Study Characteristics

Of the 11 papers (Table 3) six reported on evaluations of user involvement in nursing programmes, whilst five reported on descriptive studies of various service user engagement initiatives in nurse education. Most studies were small-scale and the dominant methodology was qualitative (n=7), employing mainly interviews and focus groups. Quantitative approaches were used in two studies, the principal method being questionnaires; in only one study was the sample above 100. Two further studies employed mixed methods.

The studies focused on differing fields of nursing, individually or in combination: adult (n=1), child health (n=1), adult and child health (n=1), learning disability (n=1), all fields (n=3) and finally studies where no field was specified (n=4). Most studies (n=8) were published from 2011 onwards. A range of perspectives was represented in the studies of service user involvement in general nurse education: nursing students (n=9), service users (n=5) and lecturers (n=4). Only two studies, from Turkey and South Africa, reported on findings outside the UK university sector.

Benefits and limitations of stakeholder involvement in nurse education

Student, service user and lecturer perspectives highlighted a range of benefits and challenges of service user involvement in nurse education. From the student perspective, service user involvement was valued (Duygulu and Abaan, 2013; Mathibe 2007). Some reported the experience as 'transformative' (Christiansen,

2011; Rhodes 2013), stimulating critical reflection on personal practice behaviours. Most frequently students stated they gained greater insight into the service user perspective (Costello and Horne, 2001; Rhodes, 2013). Others highlighted that service user involvement brought a greater reality to the education programme (Bollard *et al.* 2012). However Speed *et al.* (2012) found participants reported that significant challenges exist, particularly concerning resourcing and logistics.

Four studies considered the service user perspective and reported experiences to be rewarding (McKeown *et al.* 2012; Rhodes and Nyawata, 2011), contributing to knowledge development (McGarry and Thom, 2004). However some felt ill prepared for their role in education, insufficiently supported (McGarry and Thom, 2004) and excluded from planning (Speed *et al.* 2012).

Four studies focused on the lecturer perspective; service users were perceived to enhance the education experience (McGarry and Thom, 2004), particularly in clinical practice and simulation (Torrance *et al.* 2012). Service user engagement also strengthened the espoused programme approach of partnership working with people with learning disabilities (Bollard *et al.* 2012). However Speed *et al.* (2012) and McGarry and Thom (2004) reported that lecturers perceived service user preparation and support both during and after student sessions was under-estimated. Torrance *et al.* (2012) added concern that service users might feel 'used' as opposed to valued, if insufficient infrastructure was in place to support them.

Service user involvement in nursing student selection

The review retrieved one paper which investigated perceptions of service user involvement in process of candidate recruitment into general nursing programmes. Rhodes and Nyawata's (2011) mixed method study evaluated service user involvement in child health and adult field student recruitment from three stakeholder perspectives. The selection process involved group interviews: service users formed part of the selection panel, which also included practitioners and academics. The panel observed and participated in the group activities. The service users then contributed as panel members to make an informed decision about suitability of candidates for the nursing programme. The evaluation involved a candidate questionnaires at conclusion of the selection process and separate semi-structured group interviews with academics and service users.

Findings from candidates showed they gained a 'real' insight into nursing as a result of service user participation. The study indicated that increased authenticity was a major benefit to emerge from this initiative, reflecting the findings by Rhodes (2013) concerning classroom involvement: service users bring insights that are not available elsewhere, thus enriching the educational process.

Motivation for service user involvement in recruitment was noteworthy: service users desired to influence nursing student selection because of personal experiences of care (good and bad). They wanted to ensure the patient perspective was central to the process, and help candidates 'think about us as real people' (Rhodes and Nyawata, 2011: 441). McKeown *et al.* (2012) also found that altruism motivated service users, wanting to 'change things for the better', although participation also had the benefit of improved sense of self-worth. However service users whilst finding the experience worthwhile, wanted more preparation for their role, supporting findings from Speed *et al.* (2012).

Lecturers also acknowledged the value of service user involvement in recruitment, but were concerned about managing disagreements, including who should have the 'final say'; some also stated that success was dependent on having service users of a 'good caliber'. However one benefit of service user involvement is to be more inclusive of 'other' perspectives: McGarry and Thom (2004) argue that providing such opportunities for service users to express their perspective helps to redress the power balance between professional (academic and practitioner) and service user viewpoints.

Forms of service user involvement in education delivery

The review retrieved four papers which focused on how the service user perspective was incorporated into education delivery in general nursing programmes. Two studies reported on service-user led virtual learning resources; digital (Christiansen, 2011) and paper-based (Mathibe, 2007), and two studies considered 'face-to-face' service user involvement in classroom teaching (Rhodes, 2013; Costello and Horne, 2001).

Christiansen's (2011) phenomenological study aimed to identify different ways that digitalised patient stories can influence professional learning in final year students. Despite the absence of actual patients, Christiansen found that the stories evoked

strong emotional responses in students; a finding supported by Rhodes (2013) indicating students gained significant personal meaning from the experience. Similarly Bollard *et al* (2012) found that engagement with service users in the learning process evoked authentic connections and therefore deep learning (Prosser and Trigwell, 1999), essential for practitioner-service user partnership working. Christiansen (2011) adds that depth of learning and emotional support can be enhanced through skilled facilitation of reflection; like Costello and Horne (2001) however she argues this must be developed and supported, rather than taken for granted.

Another study utilising learning resources by Mathibe (2007) examined student perceptions of using a paper-based autobiography of cancer survivorship to explore related pharmacological knowledge. Results indicated that 80% of students found the autobiography stimulated interest in cancer medication. Whilst this study evaluates impact on one aspect of learning (pharmacology) using a tool focused on the service user perspective, contrary to the main driver for such approaches, namely providing nursing students with greater insight into the service user experience, this outcome is not investigated, a significant limitation.

The value of 'hearing patient stories' in the classroom is the focus of two further studies. Rhodes (2013) describes an in-depth investigation into impact of service user involvement on one child health nursing student prior to programme completion, then one-year post-registration, and Costello and Horne (2001) describe an survey of students' perceptions of patient involvement in classroom teaching. Whilst the learning stimulus was similar in both studies, the contrasting methodologies highlight different but complementary insights. Both report the value of interacting with 'real' patients about their care experiences; this provided insights into problems from patients' perspective (Costello and Horne, 2001) and the importance of patient centred care (Rhodes, 2013). This is unpacked in detail in Rhodes' case study which uniquely explores the transition between student and qualified practice and impact of service user involvement in education.

Service user involvement in practice-based learning and assessment

The review retrieved two studies that considered service user involvement in nurse education outside the university environment; one focused on service user involvement in learning in clinical practice (placement) (Torrance *et al.* 2012), and the other, perceptions of service user involvement in assessment of student performance in placements (Duygulu and Abaan, 2013)

A qualitative study by Torrance *et al.* (2012) explored lecturers' views on how service users were 'used' by students and their supervisors in simulation and practice settings as a means to learn nursing skills. Four themes emerged from the analysis clinical placement; patient consent; educator conflict; and developing competency. Two of these themes were discussed in the paper: 'clinical placement' captured the lecturers' united views on the need for patients to be involved in clinical education to enable the development of student competency. Interestingly service users were described as 'opportunities' to practice essential assessment and procedural skills. However the second theme 'patient consent' revealed more diverse opinions around the reality of informed consent in practice, patients' rights and wishes and issues of mental capacity, highlighting ethical issues for this important facet of general nurse education.

One other related paper was retrieved but concerned students' perceptions of service user involvement with assessment in practice. Duygulu and Abaan (2013) report on a descriptive study from Turkey concerning students' views on the proposed introduction of service user involvement in the assessment of practice (placement) performance. The study surveyed the opinions of 179 degree nursing students from one university about the value of including service users' views about their clinical practice performance. 68.2% supported service user involvement in practice assessment, particularly concerning the 'fundamentals of care'; however 64.8% perceived that objectivity could be compromised due to patients' health conditions and lack of knowledge concerning the assessment system. The authors concluded that service user involvement in assessment of practice remains controversial.

DISCUSSION

Over the last decade, service user involvement in all nurse education programmes has become an expectation of health care providers and nurse regulators. There is evidence of innovative attempts from higher education providers to address this remit in relation to general (non-mental health specific) pre-registration nurse education, although this is not without logistical (Speed *et al.* 2012) and ethical challenges (Torrance *et al.* 2012). The evidence suggests that students, lecturers and service users value the involvement of service users in education, particularly in terms of gaining (or contributing in the case of service users) more authentic insights into the illness experience and expectations of nurses. Some evidence demonstrates that students found the experience transformational in a unique way that captured the essence of person/family-centred care as opposed to professionally focused care (Christiansen, 2011; Rhodes, 2013). These findings are positive given the assumption behind policy initiatives (DoH 2010) that increased service user participation in design and delivery of education will help learner practitioners to embrace and practice person-centred care. This is of paramount importance both within the UK and internationally as there have been increasing concerns regarding a lack of compassionate care, a value which should be at the heart of nursing practice (Van der Cingel 2014). Listening and engaging with the lived experiences of service users offers a different discourse to the professional one that is traditionally shared with students by academics and practice partners, and this enables students to see beyond the clinical aspects of their role as students to include the human dimension of what nurses do.

Quality of studies

The extent of empirical work that met eligibility criteria was limited, but reflected a diverse range. Regardless of study size, well-conducted research yields valuable evidence, albeit with limitations; small-scale qualitative studies can provide the depth of rich data required to inform and inspire further work (for example Rhodes, 2013). Nonetheless many studies utilised small samples; eight of the eleven studies had less than 30 participants. This limits scope for generalisability, although there is the potential to judge transferability to similar settings.

Another limitation was that each study was conducted in a single university setting. Further, supporting the findings of Happell *et al.* (2014), authors of each study within this review appeared to be educators involved in the educational issue under investigation, which could mean their perspective was given primacy as both

gatekeepers and interpreters of data. Overall student and (given this observation) lecturer perspectives were most prominent in the results; only four studies included service users among other perspectives (Bollard *et al.* 2012; McGarry and Thom, 2004; Rhodes and Nyawata, 2011; Speed *et al.* 2012). Moreover, most studies retrieved were small-scale, exploratory or pilots, although some have potential to be scaled up for larger numbers: examples include the development and evaluation of digitalised and paper learning resources (Christiansen, 2011; Mathibe 2007). Few studies involved larger sample sizes, for example Daygulu and Abaan (2013) and Rhodes and Nayawata (2011). Whilst valuable, clearly there is scope for further multi-centre research, as well as longitudinal studies exploring the impact of service user engagement across the whole student journey and into employment as registered nurses.

Levels of service user engagement in nurse education

A concept analysis of service user involvement in health and social care education (Rhodes, 2012) usefully described the nature of service user engagement. From the analysis she identified a five-step 'ladder of involvement' of service users: level 1 is described as 'no involvement'; level 2 is 'limited involvement' where service users may 'tell their story' but do not shape the curriculum; level 3 is described as 'growing involvement' where services users regularly contribute to at least two activities (planning, delivery, selection, assessment, management or evaluation) in relation to a course or module and are paid at normal visiting lecturing rates; level 4 'collaboration', is where service users contribute to at least three aspects (planning, delivery, selection, assessment, management or evaluation) related to a course or module and this is underpinned by a statement of values and aspirations; finally level 5 is described as 'partnership' where in addition to the above, service users are involved at a strategic level and all key decisions are made jointly, an infrastructure is in place to systematically train and support service users in their role and they are employed on secure contracts.

Whilst difficult to judge given some lack of detail, the retrieved studies seemed to reflect 'limited' and 'growing involvement' (levels 2 and 3). For example several studies described service users helping to generate learning resources (Christiansen, 2011) or sharing patient stories in classroom settings (Rhodes, 2013; Bollard *et al.* 2012) (level 1 or 2). Level 3 describes a deeper level of contribution of which there is one example: service user involvement on selection panels for nursing students

(Rhodes and Nyawata, 2011). However it is not possible to determine whether studies described one-off projects or were a 'regular' feature of programmes, as specified in the ladder of involvement. The degree to which involvement was meaningful to all stakeholders is difficult to establish given lack of longitudinal impact studies and comparative research. This depth of involvement contrasts with mental health literature where there is some evidence of collaborative (level 4) working (Terry 2012). This was reflective of a more systematic involvement including co-operative inquiry in which service users were co-researchers (Lathlean *et al.* 2006), shaped the learning materials (Furness *et al.* 2011), developing and evaluating assessment tools (Stickley *et al.* 2010).

This difference may be due to several factors; firstly, the embryonic nature of inclusion of service users in pre-registration general nurse education in comparison to mental health which has a more established history. Secondly, it may reflect a wider philosophical perspective regarding the value of service user input. Whilst the demand for the patients' voice is growing politically there is little empirical evidence regarding the impact of service users' engagement in general (Minogue and Hardy 2007) nor on clinical outcomes or enhancement of clinical care. This can lead to their involvement, whilst being seen as a positive enhancement, becoming a 'bolt on extra' rather than an integral part of the educational delivery. Thirdly, scale; student numbers in adult field/general nursing are significantly larger. Therefore the numbers of staff, teaching sites and consequently the potential demand for service user involvement across the education processes from recruitment, design, delivery, assessment and evaluation is greater. These related logistical considerations may also account for slower integration of service user involvement in this area of nurse education, as well as scarcity of associated research; no studies were retrieved prior to 2001 and eight of the 11 papers were published from 2011 onwards. Preparation and support of service users, students, practice assessors and lecturing staff to maximise benefits and manage logistics of authentically engaging service users in education is a challenge, notably when managing large programmes. True integration, titled partnership (level 5) in Rhodes (2012) levels of engagement, would require significant investment by Higher Education Institutions, as engagement would have to be built within the infrastructure and philosophy of the institution; for example service users being given long term or permanent contracts with induction, as well as ongoing training and support. McKeown (2012) and Speed *et al.* (2012) both recognise the logistical challenges that success of service user involvement is

directly related to levels of support for service users, both financial and emotional. The payment of service users and the cost of staff time to prepare, support and accompany service users, is also not insignificant, not least in large nursing programmes; it is possible that such costs are hidden and/or inhibit depth of service user involvement in general nursing programmes.

Gaps in the evidence base

Some clear gaps in the research literature were apparent: unlike reviews on service user involvement in mental health nurse education (Terry, 2012; Perry *et al.* 2013; Happell *et al.* 2014), no studies were retrieved concerning service user involvement in the assessment of academic components of study programmes. This could be due to larger numbers of students typically involved in general nursing programmes and associated logistical considerations in designing assessment approaches involving service users that can be used with large groups. Similarly the lack of evidence concerning service user engagement with curriculum development in general nursing programmes was surprising given service user involvement in curriculum design and delivery, at least in the UK, is a compulsory requirement of programme approval (NMC 2010). Only one study overtly considered impact on clinical practice: the reflections of a single practitioner on how service user involvement in pre-registration education had influenced the way she practiced as a registered nurse (Rhodes, 2013). Future empirical investigation of the nature and scope of this would provide a useful addition to the literature. Lack of research in this area is surprising given that up to 50% of the undergraduate programme is located in clinical practice (NMC 2010), although logistical and ethical challenges in developing appropriate research designs with large student numbers may account for this. Given the requirement in the UK for service users to be involved in the assessment of student performance in practice placement in the UK (NMC 2010), this is clearly an area for future research.

CONCLUSION

This review is unique in its focus upon service user involvement in general pre-registration nurse education compared to other reviews concerned with mental health practitioner education. It reveals the scope of research literature is much smaller in quantity in this area of practice. It also highlights service user initiatives outside

mental health started later and in the main reflect more limited levels of service user involvement. Supporting similar conclusions to mental health nurse education (Perry *et al.* 2013; Happell *et al.* 2014), most evidence captures perceptions of value of involvement; there is limited evidence around specific outcomes of service user involvement in nurse education relating to impact on learning and clinical practice. Further, programmes with large student numbers and delivery sites are more common in adult-field (general) nurse education; we recommend that the associated logistical considerations demand new and innovative solutions to facilitate authentic service user involvement.

The review highlights much of the evidence yields rich insights from small-scale, single-centre studies, but generalisability is not possible. Further, most work is UK based. There is need for longitudinal, mixed-method; multi-centre larger-scale studies focused on effect of service user involvement in general pre-registration nurse education. Studies focused on impact specifically of service user involvement in recruitment on programme outcomes and on person-centred practice would be particularly valuable. Empirical work is also lacking concerning service user involvement in assessments, curriculum development and partnership working throughout design, delivery and evaluation of the whole educational process.

Tee (2012) argues authentic engagement in education could be a major plank in evolving strategy to address a crisis of confidence in healthcare that has emerged in developed countries. Evidence from this review supports this view, as the Insights gained from service user involvement have the potential to enable students to develop and retain person-centred values throughout their education and into registered practice. This review reveals that whilst progress in meeting this goal is on-going, as yet evidence in support of value and nature of service user involvement in general nurse education remains somewhat limited, both in terms of quality and scope of engagement.

RELEVANCE TO CLINICAL PRACTICE

- Student, lecturing staff and service users reported that involvement of service users in nurse education provided authentic insight of illness experience.
- Some students felt insights captured the essence of person/family-centred care as opposed to professionally focused care.

- Integrating service user involvement in programmes with large student numbers and multi-site delivery brings constraints due to logistical difficulties; new solutions need to be developed.
- Level of service user engagement in nurse education was limited.
- Preparation and support of service users, students, practice assessors and lecturing staff is essential to maximise benefits of service user involvement.
- There is limited evidence concerning specific outcomes of service user involvement in terms of impact on learning and clinical practice.
- The evidence yields rich insights from small-scale, single-centre studies. There is need for longitudinal, mixed-method, multi-centre larger-scale studies.

(5030 words)

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Appendix 1: Search Strategy

The results of Search 1 and Search 2 were combined for Stage 1 Screening
Databases: EBSCO Discovery Tool, including CINAHL, Cochrane Review, Education Complete, Internurse, MEDLINE, PsychINFO, Scopus, SocINDEX and Web of Science.
Limitations - Date: 1997 onwards; Language: English abstract; Peer-reviewed

Search 1

- S1 adult nurs*
- S2 general nurs*
- S3 pre-registration nurs*
- S4 student nurs*
- S5 nurs* education
- S6 service user*
- S7 patient*
- S8 client
- S9 resident*
- S10 carer*
- S11 involvement
- S12 engagement
- S13 participation
- S14 education
- S15 learning
- S16 teaching
- S17 assessment
- S18 recruitment
- S19 clinical practice
- S20 placement*
- S21 classroom
- S22 S1 or S2 or S3 or S4 or S5
- S23 S6 or S7 or S8 or S9 or S10
- S24 S11 or S12 or S13
- S25 S14 or S15 or S16 or S17 or S18 or S19 or S20 or S21
- S26 S22 and S23 and S24 and S25

Search 2

- S1 nurs*
- S2 service user*
- S3 patient*
- S4 client
- S5 resident*
- S6 carer*
- S7 involvement
- S8 engagement
- S9 participation
- S10 education
- S11 learning

- S12 teaching
- S13 assessment
- S14 recruitment
- S15 clinical practice
- S16 placement*
- S17 classroom
- S18 S1 in TI
- S19 S2 or S3 or S4 or S5 or S6 in TI
- S20 S7 or S8 or S9
- S21 S10 or S11 or S12 or S13 or S14 or S15 or S16 or S17 in TI
- S22 S18 and S19 and S20 and S21

TABLES AND FIGURES

Table 1: PICO Framework

Population P	Intervention I1	Intervention I2	Comparison C	Outcome O
Pre-reg nursing students	Service Users or Carers	Involvement in education	No involvement	Education type
<i>Literature search 1</i> adult nurs* general nurs* pre-registration nurs* student nurs* nurs* education	service user* patient* client resident* carer*	involvement engagement participation	Control	education learning teaching assessment recruitment clinical practice placement* classroom
<i>Literature search 2</i> nurs* in TI				

Table 2: Eligibility screening

Category	Inclusion criteria	Exclusion criteria
Database search		
	English language 1997 onwards No geographical limits Peer reviewed literature	Non-English language Pre 1997 Non-peer reviewed literature
Researcher judgment		
Population	Pre-registration or undergraduate or student nurses Adult, child and young person or learning disability nurses (plus general nurses - international term)	Focus on post-registration, postgraduate or qualified nurses. Focus on mental health nurses Focus on other health or social care professionals
Intervention	Involving service user, carer, resident, patient or client engagement in nurse education	No evidence of service user, carer, resident, patient or client engagement in nurse education
Outcome	Any educational activity e.g. assessment, curriculum development, education delivery in classroom and practice placement, recruitment	No evidence of educational activity
Type of Study	Empirical papers described as research or evaluation. Recognisable and replicable methodology	Editorials, commentaries, initiatives. Poorly evidenced methodology and/or analysis.

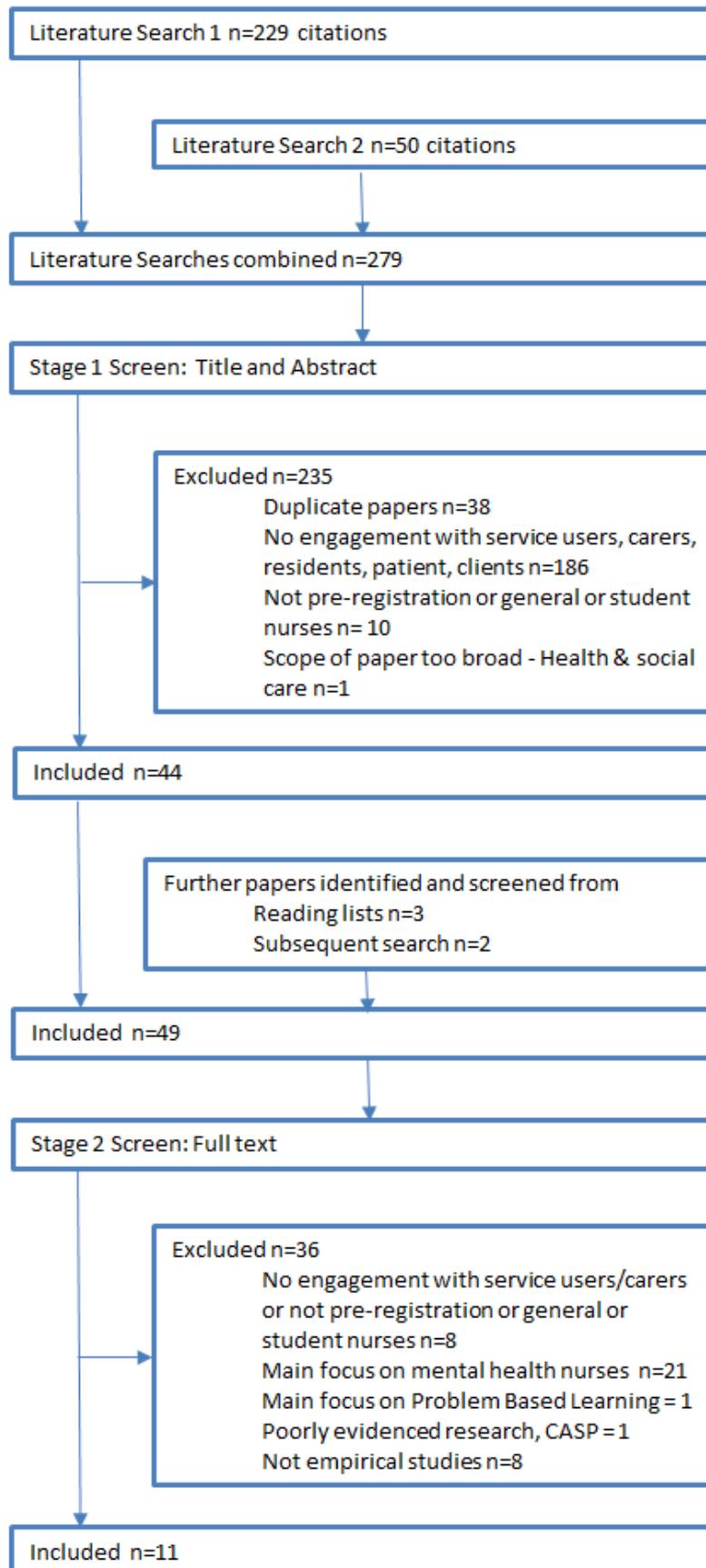
Figure 1: Search and Selection Process

Table 3: Study Characteristics and Findings

Source and Country	Practice Field	Aims	Methods (including Research Design; Participants; Data Collection; Analysis)	Findings, Conclusions and Recommendations	Limitations and Critical Appraisal Tool
Bollard <i>et al.</i> (2012), UK	Learning Disability	To present a qualitative evaluation reflecting on endeavours to include people with Learning Disability in educational activities.	Qualitative Evaluation. Project 1: 10 1st year LD nursing students, 10 1st year MH nursing students and 9 1st year SW students. Project 2: focus groups with 3rd year LD students and people with LD. Project 1: open-ended questionnaire, 29% response rate. Project 2: no info regarding sample size. Content Analysis.	Themes explored were Engagement, Processing and Interpretation. SU engagement enhances students learning. Facilitates development of personal meaning, therefore deep learning. Identified partnership, humanism and lived experience are integral notion to LD nursing programmes in UK.	Limited information provided regarding how students were selected. Identifies these were two small-scale projects and therefore difficult to replicate and generalise to other disabled groups. Appraisal=CASP
Christiansen (2011), UK	Adult, Mental Health, Learning Disability, Child	Whilst SU engagement is beneficial it can also evoke anxiety and personal costs to the SU. Proposes that patient digital stories could overcome this.	Qualitative. 20 3rd year students. Phenomenographic semi structured interviews. Data analysis two fold, 1st - categories of description identified representing the different ways the phenomenon was experienced, 2nd - provided an explanation of the way categories are logically related to one another.	4 themes were identified; as a learning resource, as an emotional experience, as a reflective experience, as a transformative experience. Study identifies the different ways in which students' experience digital learning. Recommends that emotional support is likely to be enhanced when digital stories are used to generate social reflection through use of focussed questions rather than used solely on their own.	Not able to generalise findings to other contexts due to sample size. No mention researcher team relationship with participants. Appraisal=CASP
Costello and Horne (2001), UK	Adult	Reporting on an evaluative study	Quantitative. 23 Adult students in branch programme. 69 questionnaires distributed, 67 completed. Questionnaire and small group discussion. Quasi-Statistical Content Analysis.	Clear indication that students were in favour of involving patients in teaching sessions. 56% indicated they had learnt 'a great deal', 6% 'learnt nothing' and 38% 'an adequate amount'. 85% intimated that involvement of patients helped them gain a greater understanding of patient problems. Success of patient participation depends upon teacher skills, cooperation of patient, and willingness of student. Including patient in the classroom requires student to change their frame of reference to accommodate new form of learning experience. Organisational issues such as transportation need consideration when involving SU in the classroom setting.	Single site, small sample. Researchers' role in analysis not made clear. Appraisal=Moule <i>et al.</i>

Duygulu and Abaan (2013), Turkey	Not specified	To document nursing students' opinions on involvement of service users in clinical practice assessments.	Quantitative. 2-4th year students. 249 questionnaires, 179 returned (72% response rate). Questionnaire consisting of 8 questions on demographic information, 5 on views related to assessment of clinical practice, 11 related to student opinions of SU assessment of their practice. Mix of yes/no and open ended questions. Content analysis of open-ended questions and SPSS.	68.2% were in favour of SU involvement, and statistical analysis demonstrated this view did not change according to their programme year. 60.3% thought SU involvement in clinical assessment would be useful. SU involvement needs to be well organised and have clear guidelines for all. As views on SU involvement in clinical practice assessments are varied it is important to explore how they can be best involved in these 3rd/4th year students expressed this more favourably than 2nd year. 64.8% expressed some concerns and these related to objectivity (16.2%), lack of knowledge (9.5%) and misunderstandings due to perceptions of vulnerability during sickness (8.9%). 65.9% stated current system did not sufficiently support SU engagement.	Generalisation of findings is difficult as all participants were from one nursing school. Study only included students - needs more comprehensive review including academic and practice-based teaching staff and service users. Appraisal=Moyle <i>et al.</i>
Mathibe (2007), South Africa	Not specified	To examine feasibility and student perception of using autobiography of surviving cancer as a teaching tool.	Mixed methods. 25 student nurses. Questionnaire with Likert scale and open-ended questions. Quantitative data analysed using SPSS, not specified for qualitative data.	Majority of participant's agreed/strongly agreed with 5 general statements about the value of use of popular autobiography. 80% felt it stimulated their interest in cancer drugs and 84% felt it contributed to their knowledge of pharmacology. Use of popular autobiographies preferred over didactic teaching and team working. Study needs replicated using larger sample, including other nursing schools and other professions.	Limited to student opinions and self-assessment. In addition, the paper acknowledged that the student/lecturer relationship could have had a positive influence on participants in the study. Appraisal=Moyle <i>et al.</i>
McKeown <i>et al.</i> (2012), UK	Not specified	To explore SU involvement in a university setting.	Qualitative. 21 SU. Meeting notes, actions and observations, reflective diaries, reports, talk between participants, interview, focus groups, and field notes. Participatory Action Research. Content Analysis.	More Positive sense of self in SU (participation felt to contribute to development and improved self-worth), social and relational benefits (extending social networks), altruism in activism (changing things for the better). Plurality of factors that SU value from involvement in universities. There is a moral imperative however to continue to organise fairer systems of payment for involvement. Establishing alliances between academic, practitioner staff and SU movements can ensure achieving this.	One university setting; small participant numbers. Whilst the method of analysis was clearly identified, less detail regarding the process of analysis
MaGarry and Thom (2004), UK	All	To explore experiences of user and care participation in nurse education.	Qualitative. SU (5), students (6), lecturers (5). 3 focus groups (SU, Students, and Lecturers). Thematic Analysis.	Lecturer themes: patients' experience viewed as a resource; needs focussed planning to be authentic; SU require support. Student themes: Opportunity for SU to express their perspective (redress power balance); positive experience to learn about care from patients' perspective. SU themes: reasons for involvement (altruism); rewarding experience; prefer structured sessions; contributing new knowledge for practitioners; beneficial to all parties. To achieve meaningful engagement is not simply a matter of inclusion, rather careful consideration and partnership at every stage. Individual expectations, planning and support need to be explored further if SU is to achieve optimal value.	Small scale - so limited conclusions can be drawn. Researchers were lecturers and involved as data collectors but implications not considered. Appraisal=CASP

Rhodes (2013), England	Child	In-depth investigation into impact of SU involvement on student learning and subsequent influence on practice as a qualified nurse.	Qualitative. Purposive. Single case study, one student/new graduate. Narrative Inquiry approach. Two in-depth interviews (narratives), one on programme completion, one 1-year post qualification. Interpretive approach utilising 'the listening guide' (Douchet and Mauthner 2008).	Themes: authenticity (insights not available elsewhere), knowledge of self (connecting with emotions), resilience and coping (balancing involvement with detachment), professional relationships (genuine relationships with SUC), personalisation of care (putting patient at centre of care), influence on practice (recognising the person in the patient/carer). Transformative learning had occurred and influenced practice, evidenced through increased self-awareness. SU involvement seemed similar to concept of family centred care. Contributes to emerging evidence of value of SU in nurse education, particularly lacking in children's nursing. Further longitudinal research with a range of students is required, exploring the lasting impact of involvement on practice.	Single participant case study. Experiences of one person and her lecturer. Recognised that the relationship between the researcher and participant could impact upon the objectivity of the study. Appraisal=CASP
Rhodes and Nyawata (2011), England	Adult, Child	To evaluate involvement of SUs in recruitment of child and adult nursing students from 3 stakeholder perspectives: candidate, SU and academics.	Mixed methods. 98 candidates, 4 SUs, 6 academics. Mixed method. Questionnaire for candidates (80 responded), 2 semi-structured group interviews, for SUs and academics. Questionnaires thematically analysed 'for patterns regularities and inconsistencies'. Interviews transcribed, content analysis using Burnard (1991).	Candidates themes: SU involvement made interview more authentic but some worried about upsetting SU; empowered SUC to influence future nurses. SU themes: wanted to influence selection of future nurses given their experiences of care; positive about involvement but wanted more preparation. Academics themes: Prior -worried about managing disagreements and that SU would be 'good calibre'. Concerned about cost and confidentiality of personal details. Overall made it an interesting and more authentic experience for students. SU involvement in recruitment brought sense of reality of practice. Adds quality assurance to process. SU involvement viewed positively by all stakeholders. Logistics and costs are an issue.	Questionnaire was not pre-piloted in order to identify any ambiguities. Small study in one HEI, therefore findings not generalisable. Researchers' role in analysis not made clear. Appraisal=Moule <i>et al.</i>
Speed <i>et al.</i> (2012), England	Not specified	To investigate SUs and staff views on potential barriers to becoming engaged in nurse education.	Qualitative. 38 SUs, 23 lecturing staff. Focus groups - separate for carers, service users (categorised e.g. cancer or older persons or MH) and staff (Adult, CPD, MH and Midwives). Transcribed. Thematic analysis. Analysed using framework approach (Ritchie and Spencer 1994), qualitatively analysed using ATLAS.	6 themes negatively associated with potential and actual involvement: 1. SU not knowing the context of group and their role. 2. Lack of preparation and support. 3. Not being accompanied by academic to provide support. 4. Being allowed to be 'real'. 5. Not receiving honest feedback. 6. Not paid appropriately; impact on benefits. Involvement not without difficulties. Literature overly optimistic. Needs to be well planned, supported and assurances in place from start (around payment etc). More research and policy level guidance is required regarding financial remuneration for SU. Need to consider barriers in order to make involvement effective.	Conducted in one school of nursing. Student perspective not considered. No mention researcher team relationship with participants. Appraisal=CASP
Torrance <i>et al.</i> (2012), Wales	All	To explore views of lecturers concerning use of patients in nursing education, in clinical practice and simulation.	Qualitative. Purposive sample of 51 lecturers, 19 participated across range of nursing specialities. Exploratory study using focus groups. Transcribed, analysed using NVIVO (V8), process of constant comparison. Emergent themes identified.	4 themes: clinical placement (whether expected by clinical staff and safety concerns); patient consent (informed, implied and capacity to consent and student valuing SU participation); educator conflict (about 'using' patients to learn, developing competency. Nurse educators supported benefits of SU involvement, feeling it is necessary for patients to participate in clinical training (as it always been). However there are ethical issues to consider around SU consent.	Acknowledges that further research is needed. No mention researcher team relationship with participants. Appraisal=CASP

Key: CPD (Continuing Professional Development), LD (Learning Disability), MH (Mental Health), SW (Social Work), SU (Service Users and Carers)