The Implementation and Evaluation of a Resilience Enhancement Programme for Nurses Working in the Forensic Setting

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ABSTRACT

This study aimed to implement and evaluate a work-based personal resilience enhancement intervention for forensic nurses. A mixed methods design consisting of surveys, interviews, and a case study approach, whereby the experiences of a group of nurses were studied in relation to their experiences of an intervention programme to enhance personal resilience, was utilised. Nurses working on forensic inpatient wards were invited to participate. Senior nurses were recruited as mentors. Data was collected via pre and post programme surveys to evaluate nurses' levels of resilience. Post programme interviews were undertaken with nurses and mentors to explore their experiences of the programme. Descriptive statistics of survey data examined changes in nurses' resilience levels pre and post intervention. Free text survey data and interview data was analysed thematically. The SQUIRE 2.0 checklist was adhered to. Twenty-nine nurses participated. Levels of personal resilience (M=4.12, SD=0.60) were significantly higher post-programme than pre-programme (M=3.42, SD=0.70), t49=3.80, p=0.000, 95% CI = 0.32, 1.07). Nurses felt the programme had a marked impact on their personal resilience, self-awareness, confidence and professional relationships. The benefits of the programme demonstrate the advantages of providing a nurturing environment for nurses to consolidate their resilience levels. Findings demonstrated that resilience enhancement programmes can increase nurses' levels of resilience and confidence and improve inter-professional relationships. Our findings are important for clinicians, nurse managers and policy-makers considering strategies for improving the workplace environment for nurses. The long-term impact of resilience programmes may improve nurse retention and recruitment.

Forensic Nursing, Mental Health, Mixed Methods, Resilience

INTRODUCTION

Breakthroughs in healthcare research and technologies over the last two decades have led to rapid advances in healthcare practice and clinical outcomes (Goyen and Debatin, 2009, Treasury, 2002, NHS, 2014). Whilst these advances in healthcare should be applauded, the knock-on effects on healthcare systems internationally has been substantial, with resources being stretched thinly (Black, 2013, Burmeister et al., 2019). Current and projected shortages in staff numbers, particularly amongst nurses, midwives and health visitors, represent a global challenge for the delivery of quality care (Health Workforce Australia, 2014, Institute of Medicine, 2010, NHS, 2017, Unruh and Fottler, 2006). Nursing managers can support nurses by actively identifying and implementing solutions to recruit and retain nurses in their roles (Hart, Brannan et al. 2014).

In the United Kingdom (UK), the current climate in the National Health Service (NHS) means that nurses are facing increased pressure to provide high quality, complex patient care with scarcer resources in terms of staffing, infrastructure or financial reward (Black, 2013). Safe staffing practices in mental health nursing have been highlighted as being of particular concern (Baker et al 2016). The constant strain and demand placed on nurses working under highly pressurised and often unsafe conditions and a lack of career structure or progression, means that many registered nurses are facing stress and burnout at a time when their skills and training are much needed (Jennings, 2008). In the UK, many nurses are leaving the profession, with more nurses leaving the nursing register than joining it (Nursing and Midwifery Council, 2017). In addition, the cessation of bursaries for

nursing students and an on-going public sector pay freeze has deterred many student nurses from entering the profession (The Guardian, 2017b, The Guardian, 2017a).

A recent review (Johnson et al., 2018) found that mental health staff experience poorer well-being and burnout than staff in other areas, with subsequent detrimental impacts on the quality and safety of patient care, higher absenteeism, and lower retention rates. These recruitment and retention issues are particularly common in the forensic setting, with the forensic inpatient wards under chronic pressure, due to the intensive, challenging and often draining work undertaken by mental health nurses (Merrifield, 2017). Patients admitted onto inpatient forensic wards may remain for at least a year, and sometimes over five years in high secure units. This can allow for the development of meaningful and supportive therapeutic relationships between staff and service users which are integral to recovery trajectories (McKeown, 2016). However, it can also pose a challenge when combined with complex presentations and, resistance to treatment, which makes progress slow (Davoren et al., 2015), and may be perceived negatively by some mental health nurses whose ongoing work is seemingly unrewarded in terms of positive patient outcomes. In addition forensic nurses are often subjected to physical assaults from patients and serious events, such as self-harm or suicide attempts from patients, are more likely to occur than in other clinical areas (Clarke et al., 2011).

Resilience is an individual's ability to react positively to adversity, cope and retain a sense of control over their environment, even in the face of challenges and difficulties (McDonald et al., 2012, Jackson et al., 2007, Hart et al., 2014). Workplace adversity in nursing is common as nurses' frequently experience many problems that challenge and impact on their resilience (Hart et al., 2014). Workplace adversity is often linked to excessive workloads, increased use of casual staff, decreased autonomy, bullying, violence and constantly shifting organizational change, meaning the work environment for nurses can be experienced as hostile, unrewarding and even abusive (Jackson et al., 2007). This can increase the pressure and strain on nurses, even resulting in them leaving the workforce (Jackson et al., 2007).

This paper reports the implementation and evaluation of a work-based resilience enhancement intervention for forensic nurses, with a long-term view of increasing recruitment and retention rates and improving nurses' wellbeing. This is of particular relevance in the current healthcare climate, where urgent care and consideration about how to optimise the experiences of the nursing workforce are required. Strategies and interventions to promote a more positive work life for nurses can help ensure safer, higher quality, more efficient and effective patient care is promoted and maintained.

BACKGROUND

The concept of personal resilience as a mechanism for helping nurses to successfully negotiate the healthcare system, whilst maintaining job satisfaction and ensuring that their health and wellbeing needs are met, is one that has been explored in previous literature (McAllister and McKinnon, 2008, McGee, 2006, Zander et al., 2010). However, the nature of the term resilience has been contested, with some theorising that the term carries the connotation of a personality trait, thus inferring that some individuals are more vulnerable or 'do not have what it takes' to overcome adversity (Masten, 1994).This paper draws on the concept of personal resilience as a theoretical framework used to

guide the study. Previous research has focused on personal resilience in the nursing workforce and describes personal resilience in this context as the ability to '*cope successfully despite adverse circumstances',* recognising that nurses' face daily challenges that can affect their ability to remain resilient (Hart et al., 2014). The term resilience has been associated with language such as 'rebounding', 'determination', 'coping' and 'self-efficacy' (Dyer and McGuiness, 1996, Earvolino-Ramirez, 2007, Gillespie et al., 2007). Contributing factors impacting on nurses' resilience include challenging workplaces, psychological emptiness and a lack of harmony in the workplace (Hart et al., 2014). Literature on nursing resilience suggests that nurses can, with the support of managers and mentoring relationships, actively develop and strengthen their personal resilience, making them better equipped to deal with the stressors of everyday working life (Jackson et al., 2007, Hart et al., 2014).

A literature review exploring the concept of personal resilience as a strategy for responding to workplace adversity for nurses recommended that resilience-building be incorporated into nursing education and that professional support through mentorship programmes outside nurses' immediate working environments was beneficial (Jackson et al., 2007). Jackson, Firtko and Edenborough (2007) proposed specific self-development strategies to help build personal resilience including building positive professional relationships, maintaining positivity, developing emotional insight, achieving life balance and spirituality and becoming more reflective. Furthermore, a more recent integrative review conducted to understand the phenomenon of resilience in nurses (Hart et al., 2014) provided useful information about the concept of resilience and identified a need for successful strategies to build and enhance nurses' resilience, including developing resilience programmes, as a means of aiding recruitment and retention. Cognitive reframing, toughening up, grounding connections, work-life balance and reconciliation were also identified as effective resilience building strategies (Hart et al., 2014). A narrative review examining burnout and well-being in healthcare staff working in mental health services concluded that designing interventions targeting burnout and improved patient care together may improve the effectiveness and uptake of these interventions (Johnson et al., 2018). However, despite a growing evidence base on effective workplace resilience enhancement interventions within nursing (Craigie et al., 2016, Slatyer et al., 2017, McDonald et al., 2012) , few studies examine the design and implementation of these interventions within mental health nursing (Foster et al., 2018a, Foster et al., 2019, Foster et al., 2018).

The importance of positive professional relationships has been cited as being effective in promoting nurses' workplace development (McDonald et al., 2010). McDonald et al. (2012) successfully developed and implemented a work-based educational intervention to support the development of personal resilience in nurses and midwives in Australia. The intervention included engaging nurses in mentoring relationships with senior and retired nurses. The intervention, which included engaging nurses in critical reflection, experiential learning and creativity, led to improvements in colleagues levels of honest communication regarding workplace issues, greater respect for each other's skills and experiences and a collaborative learning environment, something which is conducive to improved team-working (McDonald et al., 2012). It also benefitted participants' personal and professional lives by enhancing their confidence, self-awareness, assertiveness and self-care (McDonald et al., 2013). After completing the programme, nurses were more aware of the role of personal resilience in maintaining wellbeing and that attributes such as maintaining a positive

outlook, hope and emotional intelligence were important contributors for this (McDonald et al., 2012). The programme was particularly important for those who had experienced adversity in the workplace (McDonald et al., 2010, McDonald et al., 2013).

Using McDonald and colleagues' (2012) intervention programme as a model for our own UK-based intervention, we aimed to discover whether a resilience enhancement programme for forensic nurses would result in increased levels of resilience. Due to the sometimes negative connotations linked to the term 'resilience' (Masten, 1994), we renamed our programme 'Taking Care of Yourself to Take Care of Others'.

Our intervention consisted of six full day sessions over 12 weeks and was held in a training room at the participating trust. The intervention consisted of a variety of workshops and tackled areas such as building hardiness, maintaining a positive outlook, achieving work-life balance, reflective and critical thinking and enabling spirituality (McDonald et al., 2012). We used a similar approach to that used by McDonald et al (2012), but the intervention was adapted to fit the UK forensic inpatient environment. Each session was facilitated by two people. One was the study project manager, who was employed to coordinate and manage the sessions. The second co-facilitators included senior managers, nurses, medical directors and chaplains working in the Trust, who were invited to facilitate individual sessions due to their specific expertise in the areas being covered. All second facilitators committed to running all four cohorts of the programme. Table 1 outlines the issues covered throughout the programme.

METHODS

The study's aim was to implement and evaluate a work-based personal resilience enhancement intervention for forensic nurses at an NHS Trust in the UK.

Specific objectives were to:

- recruit a cohort of forensic nurses to the resilience enhancement intervention programme.
- evaluate the success of the intervention in terms of nurses levels of personal resilience pre and post intervention
- develop, enhance and maintain personal resilience amongst forensic nurses

Design

A mixed methods study design was deemed most appropriate for addressing our research aims. We were keen to explore any changes in nurses' perceived resilience over time to identify whether the resilience enhancement programme was a successful strategy for improving nurses' resilience in the NHS and other healthcare systems. Collecting quantitative data would allow us to infer generalizable findings to similar populations. However, concurrently, it was important to collect qualitative interview data to learn in more depth about nurse mentee and mentor experiences of the programme so that we could understand more about any benefits and challenges. This would allow us to make necessary programme modifications, to enable it to be rolled out to nurses on a wider scale. This mixed methods study incorporated quantitative and qualitative methods concurrently, in the form of surveys and interviews. The study utilised a case study approach, whereby the

relationships and experiences of a group of nurses, who are bounded by clinical context, are studied in relation to their experiences of workplace adversity and an intervention to enhance personal resilience (McDonald et al., 2013). Collective case studies can consist of several individual cases (nurses) to explore the phenomenon under study (Stake, 2000). This intervention is based on an earlier programme implemented in Australia (McDonald et al., 2012).

Data Collection

The study was conducted at a mental health and community NHS Trust in South West England. All non-agency nurses working on forensic inpatient wards were invited to participate (n=80). They were accessed via the Head of Nursing and Forensics ward manager, who distributed participant information leaflets (PILs) to registered nurses on the forensic wards. The Head of Nursing also attended Senior Nurse Management meetings to explain the project purpose and encouraged managers to release staff for the programme. It was subsequently agreed that all band 5-6 forensic nurses would be enrolled by their managers over four cohorts. Fifteen to twenty nurses were anticipated on each cohort. Convenience sampling was used to recruit as many nurses as possible provided they were eligible (table 2). Permission was given for nurses to attend the programme during working hours.

Senior nurses, working at band 7 or above in the Trust, were recruited as mentors by the research and clinical teams attending Senior Nurse Management meetings and by distributing PILs to potential mentors. Senior nurses working in forensics were excluded in case their presence inhibited participants from developing a trusting mentee-mentor relationship if they were not comfortable disclosing work-related concerns with senior colleagues. Each participant was assigned a mentor at the programme start to enable mentees to gain support and work with their mentors towards mutually agreed personal and professional goals (McDonald et al., 2013). Mentors and mentees were encouraged to communicate at least fortnightly to develop their relationship over the course of, and even beyond, the programme.

Data was collected via pre and post programme surveys with mentees and post programme interviews with mentees and mentors. Only mentees and mentors enrolled in cohorts one and two were part of the study; data was not collected for nurses who enrolled on cohorts three and four.

Pre and post programme surveys

All mentees were asked to complete a short evaluation survey at two time-points: at the start of the first programme session and after the final session. The initial survey evaluated aspects of nurses' levels of resilience, by assessing their confidence, workplace satisfaction and peer support using single items developed for this study (see table 3). It asked what they hoped to gain from the programme and whether they felt it would improve their personal resilience. It also asked participants to define resilience and how useful they perceived it was in the workplace. The post-intervention survey asked participants for feedback on the programme, its usefulness, what they liked about the sessions and what could have been improved. It asked whether the programme had changed their outlook and attitude to their nursing practice. Free text space was included. Aspects of resilience were evaluated using the same single items as in the initial survey.

Post-intervention interviews

All nurse mentees were asked to undertake short semi-structured interviews lasting 30-60 minutes. Mentors were invited to separate interviews to discuss their experience of the mentee-mentor relationship. The interviews took place following programme completion, were scheduled at convenient times and took place either face-to-face on site at the participating hospital, or over the phone, depending on participant preferences. Interviews explored participants' experiences of the programme, what they liked and what the challenges were. In addition, the interviews explored whether participants felt the intervention had impacted on their personal resilience levels. A topic guide helped guide the interviews and included questions such as 'How would you define personal resilience?'; 'What qualities do you think are important for developing resilience?'. All interviews were digitally recorded and transcribed by a local transcription company. Any potentially identifying participant data was anonymised at the point of transcription.

Ethical Considerations

Ethical approvals were obtained from the Faculty of Health and Life Sciences Research Ethics Committee at the university sponsoring the research study (FREC 2017/21). Written informed consent was obtained from all participants.

Analysis

Pre and post programme surveys

Survey data was analysed quantitatively and qualitatively. Numerical data was managed using SPSS version 25 and descriptive statistics were calculated with all variables to summarise the sample. Independent samples t-tests compared pre and post programme levels of resilience, self-confidence, belief in ability to provide good patient care, relationships with work colleagues and communication skills. Qualitative, free text data was collated and analysed thematically.

Post-intervention interviews

Data was analysed thematically using inductive and deductive approaches, and was managed using the Framework Method (Gale et al., 2013) by a research team member (ZD). A predominantly inductive approach was taken when analysing the interview transcripts. However, an overarching and broad deductive framework was constructed prior to analysis using the core components of the interview topic guide (understanding resilience, content and structure of the programme, impact of the programme). Different themes emerging from the raw data were identified and then linked and grouped together under these three overarching categories to identify any existing relationships between the themes. Microsoft Excel was used to create a framework to manage and present the breadth of interview data.

Validity and reliability/Rigour

As a means of ensuring the trustworthiness of the data analysis process regular team meetings were held, where new themes emerging from the data were discussed, as a means of generating ideas and ensuring agreement in terms of the meaning of the interviewees' words. Additionally, once the themes had been generated they were discussed with DJ who had been involved in McDonald et als (2012) intervention programme in Australia, and on which our own resilience enhancement programme was modelled. This allowed the researchers to compare any similarities and differences

between the findings from both programmes, accounting for any cultural, societal and healthcare differences. This allowed us to place the findings within an international context in terms of their transferability and relevance to other healthcare systems outside the UK.

The Revised Standards for Quality Improvement Reporting Excellence (SQUIRE 2.0) guideline was adhered to to ensure accurate and complete reporting (Ogrinc et al., 2016).

RESULTS

Participant characteristics

Twenty-nine nurse mentees were enrolled on cohorts 1 and 2 and completed the programme. Twenty-two mentors were allocated to these mentees. Demographic information is presented in table 4. Most mentees were female, aged 30-49, with less than ten years professional experience. Most mentors were female, aged 40 years or above, working in a Band 8 position, with more than ten years professional experience.

Pre and post programme surveys

Free text responses from the pre-programme surveys indicated that generally mentees believed that having personal workplace resilience was important for individual wellbeing, managers and teams, and patient care and that the resilience programme would be useful for forensic nurses. Mentees wanted to achieve numerous outcomes from the programme including gaining new knowledge, building resilience, improving personal confidence, and becoming a better practitioner. Conversely, a few mentees expressed little understanding of resilience or how the programme might benefit them.

Free-text responses from the post-programme surveys indicated that mentees had experienced many positive changes due to the resilience programme including enhanced self-awareness, improved confidence and development of coping skills and support networks. Most mentees believed that all the sessions had been helpful and indicated that the ability to interact with other mentees, mentors and senior colleagues throughout the course was particularly beneficial.

Mentees self-reported levels of personal resilience following the programme (M=4.12, SD=0.60) were significantly higher than levels prior to the programme (M=3.42, SD=0.70), t_{49}=3.80, p=0.0004, 95% CI = 0.32, 1.07. Similarly, mentees self-confidence post-programme (M=4.12, SD=0.60) was significantly higher than pre-programme, t_{50}=3.07, p=0.003, 95% CI: 0.18, 0.87. There were no significant pre- and post-programme differences between mentees' belief in their ability to provide good patient care, relationships with work colleagues, and communication skills with colleagues.

Post-intervention interviews

Twenty-four semi-structured interviews were conducted with nurse mentees (n=12) and mentors (n=12). Findings were examined in line with the three overarching categories: participants' understanding of resilience; content and structure of the programme; impact of the programme

Understanding of resilience

Mentees and mentors identified similar challenges facing forensic staff, including resourcing and staffing levels, such as recruitment, retention and reliance on agency staff, the complex mental and physical health needs of their patients, managing risk and isolated working environments.

> "Staffing is the first thing that comes to mind…the burden that falls to the core staff is huge… I think the nature of the work inevitably is hard… And I think forensic nurses carry a burden by way of being so separated from the mainstream services in the trust because of the nature of the security. Then it's not a ward you pop into easily" (Mentor, Cohort 1)

Similarly, mentees and mentors shared comparable understandings of personal resilience, as a dynamic personal quality centred around self-awareness, work-life balance, communication and the ability to manage stressful situations.

> "The ability to be stressed, to cope with difficult situations. The ability to calm yourself down and, basically, take care of yourself…it's the ability that you build up to manage difficult situations" (Mentee, Cohort 1)

Despite this, some mentees expressed an initial reluctance to being involved with the programme related to negative connotations of the word 'resilience' and a misunderstanding of the course purpose prior to it commencing.

> "I thought I was put on the Resilience Course because my manager didn't think I was resilient enough and that it was a shortfall in my performance" (Mentee, Cohort 2)

However, once the programme was completed this perspective often shifted. The mentee above from Cohort 2 described the programme as "really helpful" on completion, because of its focus on "caring for staff, trying to help you do your job better, and building with the other people there" (Mentee, Cohort 2).

Content and structure of the programme

Overall, the mentees and mentors viewed the content and the structure of the programme positively. Both thought the programme would be beneficial to nurses and other healthcare professionals working in forensics and in other areas.

> "There was a lot of stuff that could be transferred to different areas …certainly thinking about new preceptors in any of the fields really, to try and give them some tools, I suppose, to start building on when people are feeling really quite vulnerable and stuff." (Mentor Cohort 2)

Whilst the programme length was unproblematic for mentees, location was a barrier to some mentees travelling from other sites within the Trust. Regarding content, the sessions focussing on emotional intelligence and spirituality resonated particularly with mentees. However, some mentees felt the content could have been pitched more appropriately to acknowledge the stressful workplace pressures they regularly faced.

> "There was a session done on emotional intelligence…I did really like that session and it felt like I got something new from it…And there was a lovely session on spirituality" (Mentee Cohort 1)

Impact of the programme

When examining the impact of the programme from the mentees' perspectives three dominant themes emerged: key aspects of resilience; the importance of time out of the clinical environment; the role of the programme in developing new professional networks.

Mentees indicated that the programme had a marked impact on their personal resilience, self-awareness, confidence and professional relationships.

> "It's made me aware of my level of resilience…I feel I'm able to think more about how to become more resilient." (Mentee Cohort 2)

Protected time out of the clinical environment and the opportunity for self-reflection, space and time were viewed very positively. Even small details, such as the provision of food, were valued by mentees.

> "It's so busy, I'm constantly switched on. You get drained and run down. It was good to focus on me, because I always put others first. It was good to have a time where I can focus on myself." (Mentee Cohort 2)

Lastly, the way in which various aspects of the programme facilitated the formation of new, valued professional networks for mentees was an important component of the programme. This included spending time with colleagues from different wards, which is not a regular occurrence amongst forensic nurses, and meeting and communicating with senior nurses.

> "Had they [the speakers] not been as committed to the sessions as they were, in their body language and the way they were keen to get us involved and stuff, then perhaps we would have felt a bit differently. But absolutely the way the sessions were done thereby and who we had to come in to speak to us, it was really, really important." (Mentee Cohort 2)

In addition, when established successfully, mentee/mentor relationships viewed as useful and productive, generating positive gains for both mentees and mentors and leading to the development of beneficial and potentially long-lasting professional relationships. Mentees and mentors often recognised that this relationship was different to other supervisory relationships.

> "That person was able to have some very honest discussions with me about decisions and personal life, that they hadn't necessarily had with their teams and things. I think it was very much the bigger picture, rather than just what they wanted to share with their colleagues." (Mentor Cohort 2)

Overall, mentees felt that the programme could be beneficial to nursing and allied health professionals from a wide range of fields and with varying levels of experience. However, they acknowledged that being involved in a cohort of nurses specifically from within the forensic setting was a benefit to the programme, due to their shared understanding, appreciation and experience of

the forensic setting. This led to the acknowledgement that a more mixed cohort may not have had the same impact.

"Moving forward as a course I think it would be difficult to put forensic and acute and community in the same [cohort]. I think the issues although very similar, the shared experiences and things are quite different, particularly between community and ward based [settings]" (Mentee Cohort 1)

DISCUSSION

The findings reported in this paper shed light on the increasingly difficult conditions nurses are working in and point to the substantial benefits that can be incurred through the implementation of resilience enhancement programmes. A key strength of the current study was its mixed methods pre-post design, incorporating a short follow-up period, which allowed participants to provide accurate and timely feedback on the programme soon after they had completed it. The pre-post evaluation survey results allowed us to quantitatively evaluate the impact of the programme on key aspects of resilience, such as personal resilience and confidence. The qualitative findings were then used to unpack how participants' knowledge, understanding and perspectives shifted throughout the programme, and which aspects of it, in terms of structure and content, were most important for mentees and mentors. Previous studies evaluating the implementation of workplace resilience enhancement interventions for nurses have contained no, or limited, qualitative data, longer follow-up periods, and/or small sample sizes (Foster et al., 2018a, Foster et al., 2018, Craigie et al., 2016, Slatyer et al., 2017). Our study enabled us to utilise a mixed methods approach to rigorously explore some of the issues impacting on resilience in the nursing workplace.

Our increasingly under-resourced UK healthcare system coincides with the profile of mental health gaining credence in the UK and internationally, with more funding being put into mental health research and an increasing focus on tackling mental illness being at the forefront of policy, research and commissioning priorities (Mental Health Foundation, 2019). This may go some way towards destigmatising mental health at an individual and population-based level. As a result, it appears timely that real consideration should be given as to how to support the mental health nursing workforce, to improve patient outcomes, quality of care and work-based satisfaction.

The quantitative and qualitative findings support previous international research around the benefits of resilience enhancement programmes for nurses and reaffirm the importance of increasing professional networks for nurses, as well as developing skills and tools to improve individuals' emotional insights, life balance, spirituality and reflectivity (Hart et al. 2014; Jackson et al., 2007; McDonald et al. 2012; McDonald et al. 2013; Foster et al 2018a, 2018b). Whilst individual nurses may possess these skills and qualities to a greater or lesser degree, the constant barrage of daily working life can reduce people's capacity to draw on and utilise these skills in times of need. The provision of time and space, over a 12 week period, to reflect on personal and professional issues in a safe, confidential and understanding environment, with peers who may share similar experiences may help nurses to reidentify with and re-examine their coping mechanisms, enabling problem solving and improving their confidence as a result (McDonald et al. 2012). Overall, participants evaluated the programme positively, including mentees who had exhibited a reluctance to attend prior to the programme commencing.

Building new professional networks was an important outcome of the resilience enhancement programme for many nurses. For forensic nurses the value of building these new networks is even more pronounced because of the nature of the work undertaken and the relative disconnect of the forensic wards from each other and from other services in the trust (Dickinson and Wright, 2008) . The value of the mentee/mentor relationship was also clearly identified by mentees and mentors in this study and will be reported on in more detail in a subsequent paper. Mentees valued that senior colleagues had taken the time to co-facilitate the programme sessions on a regular basis. This, as well as having time outside of the wards, contributed to increasing participants' self-worth, as they felt they were being listened to. This demonstrates the importance of good communication between staff at all levels, regardless of banding, status or seniority. Social support is a significant component in resilience, and in busy healthcare organisations, it is imperative that the people at the frontline, who are delivering patient care, develop nurturing and supportive collegial and external professional relationships, and feel respected and that their voices are heard by middle and senior managers, to avoid a disconnect, due to feelings of worthlessness or disregard (McGee 2006; McDonald et al 2016; Jackson 2007).Our resilience enhancement programme is one way of providing these connections, by promoting a forum whereby healthcare professionals at all levels can communicate and express their viewpoints and concerns, without the usual hierarchical infrastructures inhibiting people from speaking freely, thereby promoting empowerment and allowing senior staff to gain valued, honest feedback from those who are at the centre of patient care.

Previous research has demonstrated the positive effects of resilience programmes for older, clinically experienced nurses (Foster et al., 2018a, Foster et al., 2018). However, our findings highlight the benefits of resilience enhancement programmes for less experienced, junior staff. During the programme sessions and through the mentoring partnerships, participants were able to consider their own professional experiences, and explore their own career trajectories both within and outside of the forensic setting, highlighting the benefits of peer learning and mentorship support within the programme. Providing junior nurses with appropriate professional support structures and mechanisms can positively impact upon their staff development and retention. The benefit of the programme to unregistered staff, such as healthcare assistants, or newly qualified staff, should be explored in future work.

Many of the challenges facing forensic nurses, such as staff shortages and time pressures are commonplace across nursing settings (Health Workforce Australia, 2014, Institute of Medicine, 2010, NHS, 2017, Unruh and Fottler, 2006). As a result, our programme has the potential to benefit nurses working across different specialities. However, whilst the findings demonstrated that forensic nurses were keen to connect with a diverse range of colleagues, due to the shared understanding and experience imbued from being a nurse, there may also be value in bringing together nurses working in the same area, such as forensics or accident and emergency, due to the context specific experiences they encounter. Indeed, the 'locked down' nature of the forensic setting makes it inherently different than most other nursing settings due to nurses being less open to colleagues and patients whilst they are at work, to protect themselves from potential workplace dangers. This 'closed off' approach may appear to contradict some of the key principles of nursing, which advocates for openness, tangible care and compassion and relies on peer support for informal debriefing processes. As a result, the professional role identities of forensic nurses may differ substantially from those of nurses in other settings and this must be considered when implementing

the programme in other healthcare environments. Consideration of the pros and cons of diversifying the pool of programme participants across different nursing settings must occur to ensure that nurses who participate in the programme feel they have a safe space for frank and open discussions with their colleagues, to generate a cohesive group dynamic.

Limitations

This study sampled nurses working in a forensic mental health setting, where many of the nursing practices and routines are markedly different than those undertaken in other mental and physical health care settings. As a result, the study findings may not necessarily be representative of the general nursing population. However, many of the work pressures identified by study participants centred around a lack of staffing, constant time pressures and a ceaseless workload; these are factors which are commonplace among nurses working in most care settings, increasing the generalisability of the findings to other nursing environments. In addition, most of the sample population were female; whilst this is reflective of the gender balance of nurses working in the profession, future work could be carried out to identify whether male nurses identify similar issues relating to resilience and whether they gain similar benefits from such a programme. Lastly, aspects of resilience were quantitatively evaluated in this study using single item measures as part of a brief pre-/post- programme evaluation survey developed to assess the outcomes of this programme. These items were not part of a validated measure of resilience and as such, should be treated as indicative only. Future studies examining the effect of work-place resilience training programmes should seek to use a valid and reliable measure of resilience so that more robust conclusions can be drawn from the quantitative data. However, this is a mixed methods study, a key strength of which is the ability to triangulate data from different sources to examine the same phenomenon. Indeed, the quantitative results of this study do support the more in-depth qualitative findings arising from the interview data and, taken together, provide good evidence for the positive impact of the programme on this cohort of nurses working in the forensic setting.

CONCLUSION

This paper has reported on a mixed methods study carried out to examine the impact of a resilience enhancement programme for forensic nurses. Findings have indicated that most nurses working in highly stressed workplace environments already carry with them a baseline level of personal resilience, which enables them to function amongst the daily stressors that they encounter. However, the marked benefits reported both qualitatively and quantitatively from nurses who undertook the programme demonstrate the advantages that can be gained from providing a nurturing environment for nurses to consolidate their resilience levels, with time and space to reflect on their nursing role on both a personal and professional level. This finding is important for clinicians, nurse managers and policy makers when considering strategies for improving the workplace environment for nurses in the UK and internationally. Through providing dedicated resilience training, nurses can be given the tools to feel empowered and to recognise the valued contribution they make to the nursing workforce. As such the long-term impact of resilience training programmes could be an effective mechanism for improving retention and recruitment rates amongst this highly skilled and much needed workforce.

RELEVANCE FOR CLINICAL PRACTICE

Our successful evaluation of the resilience enhancement programme has led to it being implemented at a Trust wide level, with all band 5 and 6 nurses invited to join the programme. We intend to measure nurses' retention rates across the Trust pre and post implementation of the programme as a way of measuring its impact over time. If deemed of value, our long-term aim is to roll out the programme to other trusts on a national level. Our programme can be adapted for use in different healthcare systems internationally as a means of producing well-supported, creative and positive working environments for nurses.

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TABLES

Table 1: Resilience Enhancement Programme Outline (McDonald et al 2012)

Session	Session Aims
Session 1: Mentoring relationships (for participants) **Establishing positive nurturing relationships and networks** **Mentoring information session**	• Introduce concepts of Mentoring Partnerships (MPs) • Explore benefits and opportunities for MPs in health care • Identify roles and responsibilities of MPs • Consider styles and strategies of MPs • Identify common pitfalls associated with mentoring • Link concepts of mentoring to personal and organisational learning • Focus on protective aspects of positive relationships and networks on the effects of workplace adversity • Mentors' roles and expectations, issues of accountability • Promote reflection on past mentoring experiences, current skills and aptitudes
Session 2: Building hardiness **Maintaining a positive outlook**	• Identify elements of a positive outlook and personality hardiness related to nursing • Demonstrate benefits of maintaining a positive outlook and developing hardiness for job satisfaction and health and wellbeing • Define principles of intellectual flexibility (IF) and emotional intelligence (EI) • Formulate strategies for improving/maintaining positive outlook and hardiness • Interpret strategies shown to promote a positive outlook and workplace hardiness
Session 3: Intellectual Flexibility **Emotional Intelligence**	• Define the principles of IF and EI • Define existing research findings regarding IF and EI as they relate to nursing • Evaluate advantages of applying elements of IF and EI to nursing practise • Reflect on strategies to assist creative and critical thinking capabilities
Session 4: Achieving life balance **Enabling spirituality**	• Define importance of awareness of work/life balance for health/ wellbeing • Demonstrate at least two strategies for improving work/life balance • Formulate historical/political background of people's roles in caring/other work • Explore some aspects of spiritually responsive nursing care available

	• Explore perspectives on spirituality in relation to contemporary lifestyles
Session 5: Reflective and Critical thinking	• Identify importance of therapeutic use of self and reflection in expert practise • Demonstrate understanding of benefits of reflective process to individual nursing practise and its underlying knowledge, influences and motivations • Define model of reflection to increase critical thinking and reflexive practise • Analyse individual strategies to access and explore the reflection process
Session 6: Moving forward and planning for the future	• Identify features of a resilient person and relate them to own experiences • Formulate strategies for continuation of resilient beliefs and behaviours • Demonstrate understanding of the on-going process of resilience and the protective benefits of long-term maintenance of personal wellbeing. • Present a creative piece that exhibits personal growth in one or more of the targeted areas of resilience

Table 2: Eligibility criteria for nurses enrolled on resilience enhancement programme

Inclusion criteria:
• Non-agency nurse • Registered with Nursing and Midwifery Council • Band 5 or 6 • Working in inpatient forensic setting • Ability to attend the majority of programme sessions
Exclusion criteria:
• Agency nurse • Non-registered nurse • Band 7 or above • Not working in inpatient forensic setting • Inability to attend majority of programme sessions

Table 3: Pre- and post-survey resilience items

Item		Response options
How would you rate your current:	Level of personal resilience? Level of self-confidence in the workplace? Belief in your ability to provide good patient care?	Low … High 1 2 3 4 5
	Relationship with your work colleagues? Communication skills with your colleagues?	Bad / Poor / Neither good or / Good / Excellent 1 2 3 4 5
How important do you feel this 12 week programme has been for improving your own:	Level of personal resilience? Level of self-confidence in the workplace Belief in your ability to provide good patient care? Relationship with your work colleagues? Communication skills with your colleagues?	Not important at all / Not very important / Moderately important / Largely important / Extremely important 1 2 3 4 5

Table 4: Participant Demographics

Participant Characteristics n (%)		Mentees (n=26)†	Mentors (n=17)‡
Age in years	18-29	3 (11.5)	4 (23.5)
	30-39	10 (38.5)	2 (11.8)
	40-49	10 (38.5)	4 (23.5)
	50-60	3 (11.5)	6 (35.3)
	>60	0 (0.0)	1 (5.9)
Sex	Male	5 (19.2)	3 (17.6)
	Female	21 (80.8)	14 (82.4)
Currently working	Yes	n/a	17 (100.0)
	No	n/a	0 (0.0)
Band	5	14 (53.8)	0 (0.0)
	6	11 (42.3)	0 (0.0)
	7	1 (seconded) (3.8)	6 (35.3)
	8	0 (0.0)	10 (58.8)
	Other	0 (0.0)	1 (5.9)
Years in profession	<1	0	0 (0.0)
	1-5	12 (46.2)	1 (5.9)
	6-10	4 (15.4)	5 (29.4)
	11-15	5 (19.2)	1 (5.9)
	>15	5 (19.2)	10 (58.8)

† Missing demographic data n=3; ‡ Missing demographic data n=5