### Wounds and mental health care: System thinking

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Wounds and mental health care: System thinking

Introduction

The delivery of high-quality care is integral to improving the health of populations and the sustainable development of nations (Brende and Høie, 2014, United Nations, 2015, Zoghbi et al., 2014). Patient safety is a key consideration in any system-level efforts to deliver care that enhances the health and wellbeing of populations (WHO, 2006). There are international efforts to improve population health through shared learning and interprofessional team working (Mulley, 2013, Washington et al., 2016). These efforts to reduce mortality and improve population health are often referred to as grand convergence (Boyle et al., 2015, Yamey and Morel, 2016).

Improving population health through grand convergence has been considered in relation to many aspects of healthcare including skin health, but is rarely considered in relation to wound care (Samuriwo, 2018). Despite this, there have been considerable efforts to improve wound care related population health through research studies and quality improvement projects. Most of these research studies and quality improvement projects have focused on improving care relating to most common types of wounds such as pressure ulcers, diabetic foot ulcers, surgical wounds and burns (Nurmatov et al., 2017, De Meyer et al., 2017, Roberts et al., 2017, Bakker et al., 2015, Bosanquet et al., 2015).

However, there has been less of a focus on the organisation and delivery of wound care to people who are experiencing mental ill health. The wound care of people that are experiencing mental ill health tends to be led by nurses in specialist roles in tissue viability such as specialist or consultant nurses. The overall coordination of care for people living with mental health difficulties is typically led by practitioners working in mental health care-providing organisations, but on a day-to-day basis these mental health practitioners have limited access to specialists with expertise in wound care (Kilroy-
Findley, 2010a, Kilroy-Findley, 2010b). **Nurses with specialist skills in tissue viability and wound healing may have a limited insight into mental health care.** This can have important consequences for the provision of joined-up care, particularly as people experiencing mental ill health can have difficulties (such as poor nutrition, or specific mental health-related experiences such as psychosis, or depression) which have a negative impact on wound healing (Kilroy-Findley, 2010a, Kilroy-Findley, 2010b).

The importance of better integrating care for people with mental health problems and wounds has been recognised through individual initiatives. There has been a focus by tissue viability nurses on improving the quality of wound care that is delivered to people experiencing mental ill health through measures such as wound care education and training for mental health nurses as well as the creation of a wound care formulary that can be used by mental health nurses (Day et al., 2007, Kilroy-Findley, 2010a, Hemingway et al., 2013). These important efforts led by tissue viability nurses have focused on improving the wound care provided to people that access mental health care services by upskilling mental health nurses in relation to wound care. In this paper, we consider how the wound care of people experiencing mental ill health can be improved at a population level through a different way of thinking that is informed by theory.

**Systems thinking**

People with mental ill health and wound-related needs receive services through two care systems which are organised and structured in different ways. These systems are populated by professionals with differing educational backgrounds and sets of skill and knowledge and differing working practices.

Mental health and wound care professionals are most often located in different geographical settings and may be employed by entirely different organisations. A starting point in any consideration of how professionals in these two systems might better collaborate to achieve the best possible outcomes is to think, explicitly, about the implications of the observation that healthcare at a national or population
level is delivered in complex systems in which different multiple factors, agents and actors interact in multifaceted ways (Haffeld, 2013, De Savigny and Adam, 2009, Timmins, 2015). Complex health systems are full of interconnections, are unpredictable and often evolve in ways which are quite different from those expected by policymakers and managers (Braithwaite et al., 2017). In the face of complexity, expectations are placed on staff to promote patient safety, in which people receiving care are spared avoidable harm and to practice in a manner that optimises care quality irrespective of the manner in which healthcare is organised and structured (European Patients’ Forum, 2016, WHO, 2005). The adoption of a systems approach is fundamental to ascertaining what can be done to improve the health and wellbeing of populations (De Savigny and Adam, 2009, Hill et al., 2014, Rutter et al., 2017).

Improvement initiatives and interventions underpinned by systems thinking and pertinent theory have been shown to improve population health and well-being in different settings (Barker et al., 2015, Davidoff et al., 2015, Dixon-Woods et al., 2011). We consider how system thinking informed by boundary theory can be used to improve wound care for people experiencing mental ill health at a population level.

**Boundary theory**

In health care systems quality and safety are influenced by the boundaries that exist between the different professionals that deliver care (Dixon-Woods, 2010, Powell and Davies, 2012). These boundaries arise from the fact that each of the professions involved in the delivery of healthcare has its own culture and identity, fostered by people in that profession (Gieryn, 1983, Salhani and Coulter, 2009) and characterised by shared learning and understanding (Mackintosh and Sandall, 2010). Learning and shared understanding that transcends professional boundaries between two communities can be generated through the use of boundary objects (Akkerman and Bakker, 2011, Mackintosh and Sandall, 2010). Boundary objects such as care pathways and models transcend professional boundaries because
they can be understood and used in different ways by each community (Allen, 2009, Bakker et al., 2011, Fox, 2011, Jensen and Kushniruk, 2016).

The care trajectories of people with wounds that are also experiencing mental ill-health traverse the professional boundaries between two groups of nurses. Professionals working in tissue viability and mental health care have their own identities and cultures which relate to the type of care that they deliver. It may be argued that professional boundaries that affect the care of mental health service users would be best overcome by training some mental health nurses to become tissue viability specialist nurses in order to ensure that each organisation which provides mental health care has at least one expert in this area. However, it would be challenging to achieve this objective given the difficulties that exist with regards to the recruitment and retention of nurses especially in mental healthcare coupled to a context where there is an increasing demand for mental healthcare services (Buchan et al., 2019, CQC, 2018, Redknap et al., 2015, WHO, 2013).

Training mental health nurses to become expert in tissue viability care would require clarity at a system level about the nature and amount of training required, well as consideration being given to how the removal of nurses from the mental health nursing workforce to complete training would be managed given the reports (CQC, 2018, WHO, 2013) of an increased demand for mental health services. There is also the prospect that training mental health nurses to become tissue viability specialist nurses could inadvertently create additional professional boundaries that impinge on the wound care delivered to mental health service users as they would in effect be a third professional group of nurses with their own culture and identity. The rising demand for mental health care services coupled with the challenges of recruitment and retention of mental health nurses underscore the imperative to explore alternative system-level approaches that can be adopted to improve the wound related care of mental health care service users.
In order to ensure that people living with mental ill-health and wound-related needs receive the best possible care, it is worth appraising how boundary objects can be used to span the interface between tissue viability and mental health services. Professionals in both fields use care plans to inform and underpin the organisation and delivery of care. Care plans are a common currency, and it is possible that integrated care plans which address all needs can act as boundary objects that facilitate the delivery of high-quality wound care to people that use mental health services. Therefore, it is worth considering how integrated care plans can be devised and utilised, as well as how barriers to their creation and use can be overcome.

**Integrated care plans**

Care plans which are tailored to the person receiving care, have value and are meaningful to them, and which bridge the gaps between practitioners working in different parts of the larger health and social care system are challenging to produce. Research (Coffey et al., 2017, Drummond and Simpson, 2017, Simpson et al., 2016) into care planning and coordination in community mental health settings reveals that people using services are not always involved in care planning processes, with practitioners describing their work in this area as being administratively burdensome and largely focused on risk management. This contrasts with the aspiration that care plans for people receiving mental health care contain clear recovery focused goals with genuinely individualised ideas for their achievement (Coffey et al., 2017, Cranwell et al., 2017, Doody et al., 2017, Faulkner, 2017, Simpson et al., 2016). Dedicated training run over two days to prepare practitioners to produce care plans which reflect the principles of shared decision-making has been shown to be acceptable to staff but not to improve outcomes for people using services (Lovell et al., 2018). Current evidence (Coffey et al., 2017, Cranwell et al., 2017, Simpson et al., 2016) suggests that co-produced care plans involving professionals and people using services are not being routinely produced, and that training on its own has limited impact. No clear
evidence base therefore exists to support interventions to improve collaboration between people providing, and people using, mental health services. In wound care services, well-designed and co-produced care plans are held to improve the quality of care as they provide an integrated and synchronous approach to improve the care process and the outcomes for the person receiving care (Downie et al., 2013, Heywood et al., 2015). Although it may be unclear how to improve the co-production of care plans between service users and professionals an immediate, and achievable, goal may be for practitioners in mental health and tissue viability services to use care planning to improve the way they communicate and integrate their activities.

It is important to consider what integrated wound care planning for people that utilise mental health care services might look like in practice and how integrated wound care plans might work effectively as boundary objects to deliver the best possible outcomes. In order to overcome the professional boundaries as well as other contextual factors that exist with regards to wound care for people that access mental health services, integrated care plans would have to be developed, maintained and used to underpin the delivery of care in a well thought out way.

The principle of identifying a single professional to assume responsibility for the assessment, planning review and coordination of care is well-established in the mental health system (Hannigan et al., 2018). The care coordinator role often falls to mental health nurses, placing them in a good position to take the lead in making sure that integrated care plans are produced which include detail on how to respond to wound-related needs. Mental health nurses acting as care coordinators means actively brokering working relationships with staff in other parts of the larger system, in this case tissue viability services. Elements of the mental health care that is delivered may contradict the principles of what is considered to be best practice in wound care. Mental health care harm reduction strategies such as ‘safe self-harming’ are considered in some contexts to be an appropriate way of promoting recovery from mental
illness (NICE, 2018, Sullivan, 2017), but they are contradictory to what is considered to be best practice in wound healing. Joint care planning and review meetings offer the opportunity to lay bare differences in working practices and cultures across different teams and services, and to agree – optimally with service user involvement – plans which are agreed by all.

The experience of mental illness can directly impact on the provision of care necessary for the promotion of wound healing. It may be challenging for a person experiencing mental ill health to adhere to what is considered, in a tissue viability context, to be the best course of action. For example, adequate nutrition and hydration is integral to preventing wounds and promoting wound healing (Guest et al., 2015, SIGN, 2010, NPUAP et al., 2014, NICE, 2014) but a person living with an eating-related problem such as anorexia, or a person living with dementia, may find it difficult to maintain an adequate level of nutrition. Mental health nurses can take the lead role in negotiating the parameters in which wound care can be delivered, in a manner that helps to facilitate both mental health and physical health recovery. This will involve the sharing of tissue viability expertise, so that principles and practices of wound care can be incorporated into single, integrated, care plans with value for all practitioners involved and for service users. Active patient/service user engagement in wound care planning is recognised as integral to delivering care that facilitates wound healing (Grothier and Pardoe, 2013). For integrated wound care plans to be effective, they need to be accessible to both mental health and tissue viability nurses throughout the patient’s care trajectory. One approach would be for the integrated wound care plans to be can be devised, developed and maintained on electronic systems that both mental health nurses and tissue viability nurses can access so that they keep track of how the patient’s recovery from mental illness and wound healing is progressing.

Given the reported gaps in mental health nurses’ wound related knowledge, and tissue viability nurses’ mental healthcare knowledge, there is an imperative for a more integrated approach to wound care
planning for people that access mental healthcare services. In other words, it would be best at a population level to move towards a system level approach in which mental health care nurses and tissue viability nurses work collaboratively to plan and deliver wound care to people experiencing mental ill health in line with their care trajectory. Perhaps, then a prudent first step in addressing some of the prevailing challenges that exist with regards to the wound care of people experiencing mental ill health is to put in place policies and measures at a system level that facilitate integrated care planning such as shared patient documentation or electronic records.

**Conclusion**

It is important for tissue viability nurses and others with an interest in wound healing to adopt a different approach with regards to the wound care of people experiencing mental ill health. Instead of focusing on educating and training mental health nurses about wound care, an alternative is to adopt a system approach and informed by boundary theory which makes best use of the knowledge and skills of tissue viability nurses and mental health nurses to deliver integrated care for individuals.

In this paper we have set out how a pragmatic approach to the wound care of people experiencing mental ill health can be improved through a system thinking approach informed by boundary theory. For this approach to be effective, it is important that tissue viability nurses and others with an interest in improving wound healing care for people experiencing mental ill health adopt a different approach in which there is greater interprofessional collaboration. Effective, joined-up, care for people with mental health problems and wounds requires collaboration between nurses with different educational backgrounds employed in different parts of the health and social care system. Integrated care plans are one way of promoting joint working of this type and have the potential to bridge the gaps. The goal of person-centred care planning in the case of people with mental health difficulties and wounds requires active boundary-spanning on the part of practitioners. Care planning processes and templates which
minimise the administrative burden, and which place a premium on values of co-production and collaboration, are also needed. Further research and quality improvement initiatives must explore how integrated wound care plans can be implemented in practice in a manner that transcends professional boundaries but brings about the best possible outcomes for people experiencing mental ill health that require wound care.
References


MACKINTOSH, N. & SANDALL, J. 2010. Overcoming gendered and professional hierarchies in order to facilitate escalation of care in emergency situations: The role of standardised communication protocols. *Social Science & Medicine, 71*, 1683-1686.


