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Wounds in mental health care: The archetype of a '*wicked problem of many hands'* that needs to be addressed?

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Abstract

This paper explores wound care for people living with mental health difficulties from a nursing perspective and considers what can be done to improve it.

Objective: To analyse policy and practice relating to wound care for people experiencing mental ill health using the ideas of 'wicked problems' and 'problems of many hands'

Methods: Policy and practice analysis informed by theory.

Results: Recent UK policy is to ensure parity of esteem so that people with mental ill-health receive the same quality of care as those with physical ill-health. However, the provision of physical care to people experiencing mental ill health, including the provision of wound care, constitutes a 'problem of many hands' arising in the context of the mental health system being a complex one replete with wicked problems. Wicked problems are resistant to solutions and problems of many hands are complex and multifaceted and involve the interplay of different actors. Addressing problems of many hands in this context requires systems thinking and solutions enabling different people to work collaboratively.

Conclusions: The wound care of people experiencing mental ill health has been largely overlooked, as it transcends the domains of mental health and tissue viability policy and practice. A strong system level approach is needed to improve care, characterised by closer interprofessional teamworking.

Keywords: Health policy, Mental Health, Wound care, Organisation and administration, Public policy

Conflict of interest: None

Highlights

- The wound care of people experiencing mental ill-health is largely overlooked
- People with mental illness receive their wound care from tissue viability nurses
- Wound care can be conceptualised as a 'problem of many hands'
- System level policies are needed to improve this aspect of health care

Author contribution - Credit author statement

Ray Samuriwo: Conceptualization, Methodology, Formal analysis, Investigation, Writing-original draft, Writing- review and editing, Visualisation, Supervision

Ben Hannigan: Conceptualization, Methodology, Formal analysis, Investigation, Writing- review and editing

Introduction

Improving the quality of health and social care is a priority for governments and professionals throughout the world (WHO, 2015). There has long been a global focus on improving the quality of mental health care delivered in all contexts (World Health Organization, 2003). There is also an international consensus about the need to deliver mental health care in an equitable manner (Royal College of Psychiatrists, 2013; WHO, 2013). This consensus is reflected in key policy and practice drivers in the UK (Centre for Mental Health, 2013; Lord Carter of Coles, 2018) which are designed to ensure parity of esteem in the quality of physical and mental health care that is delivered by health and social care professionals. The focus on the delivery of fair and just health care has been underscored by the reconceptualization of mental ill health through a human rights lens with psychological distress recognised as arising through the interplay of biological, social and psychological factors (Grant & Gadsby, 2018; Johnstone et al., 2018). Initiatives in a range of different mental health contexts have resulted in improvements in outcomes for groups of people using services and their loved ones (Cox et al., 2016; Laderman, Dasgupta, Henderson, & Waghray, 2018; Ross & Naylor, 2017; Taylor-Watt, Cruickshank, Innes, Brome, & Shah, 2017; Versteeg, Laurant, Franx, Jacobs, & Wensing, 2012), with research efforts to identify effective ways of improving the quality of mental health care brought together in a recent themed review (NIHR, 2018).

In this paper, we use a social scientific lens that draws on the concepts of 'wicked problems' and 'problems of many hands' to understand the policy and practice challenges that exist with regards to the wound care of people experiencing mental ill-health from a nursing perspective. A succinct historical and sociological narrative of policy and practice in this area is first set out, in which we give consideration to the concepts of professional jurisdiction and domains of practice. We then proceed to reconceptualise the wound care of people experiencing mental ill health as a problem of many hands set in a larger, complex, system context and set out the wider policy implications of this analysis for those with an interest in wound healing, mental health and/or quality improvement in health care.

Wounds and mental health care

Historically, wound care has not been an improvement priority for organisations that provide mental health care as their focus has tended to be on delivering services that facilitate recovery from mental illness (Ray. Samuriwo & Hannigan, 2019). A number of contemporary national (DH, PHE, & NHS England, 2016; Welsh Government, 2012) and international (WHO, 2013) strategic drivers on mental health care focus on improving the provision of mental health care but do not provide any clear guidance on the delivery of wound care. There are many international guidelines (Alsbjorn & Buntzen, 2007; Bakker, Apelqvist, Lipsky, Van Netten, & Schaper, 2015; Birke-Sorensen et al., 2011; Franks et al., 2016; Ito et al., 2016; Kelechi & Johnson, 2012; NPUAP, EPUAP, & PPPIA, 2014) for different aspects of wound care, but many of the measures that they set out can be untenable, inappropriate or counterproductive in the care of people experiencing mental ill health. Despite the lack of focus on this topic, there is an exigent need to consider how wound care can be improved for mental health care service users. Some people's underlying mental health difficulties and/or substance misuse problems increase the likelihood of experiencing specific types of wounds. Examples are wounds related to self-harm, and the misuse of prescription medication or illegal drugs

resulting in burns, incisions, abscesses and leg ulcers (Coull, Atherton, Taylor, & Watterson, 2014; Geraghty, 2015; Hemingway, Atkin, & Stephenson, 2013; Kilroy-Findley, 2010). Some wounds of this type, such as leg ulcers arising from intravenous drug use, often require surgical interventions or limb amputation to promote healing (Butcher, 2000; Coull et al., 2014; Geraghty, 2015). In addition, psychological distress can have a negative impact on wound healing (Hemingway et al., 2013). Some people receiving mental health care can also find it challenging to adhere to key elements of the advice and support that they are given with regards to wound care, especially if they have other health or social care problems such as substance misuse or being homeless (Geraghty, 2015; Kilroy-Findley, 2010). The particular mental health care issue that a person is dealing with can also make it difficult for them to remain concordant with the wound care-related treatment that they are given, for example if they are also experiencing episodes of eating-related disorders, depression or self-harm (Hemingway et al., 2013; Kilroy-Findley, 2010).

It has been reported (Cleary et al., 2018; Hemingway et al., 2013) that the wound care of people experiencing mental ill health and who also have self-inflicted wounds or burns is particularly challenging for clinicians as there is some uncertainty about whether and how to deliver active wound care treatment to the patient in the context of also supporting the person to address the issues that have resulted in self-harm. In most cases when a person experiencing mental ill-health has self-inflicted burns the immediate focus is reported to predominantly focus on treating the burns injuries rather than on interventions to also promote psychological recovery (Cleary et al., 2018). In the immediate aftermath of self-inflicted burns, care may be led by specialist burns or tissue viability nurses who have limited insight into mental care and who prioritise burns treatment as they perceive the burns to be more imminently life threatening than a person's underlying mental ill health. For people that have self-inflicted wounds, there is also a school of thought that it is sometimes more prudent to support the person to self-harm in a less damaging way such as through "safe cutting" for a limited period of time as part of the recovery process. Sullivan (2017), for example, makes an ethical case for this by arguing that harm minimisation can result in less physical damage whilst also preserving autonomy. Further, in current UK clinical guidelines addressing the longer-term treatment and management of self-harm, the National Institute for Health and Care Excellence (NICE) (2018) advises that where stopping self-harm is unrealistic in the short term practitioners should give thought to discussing less damaging ways of self-harming, other than in the case of self-poisoning for which no safe strategies exist.

The majority of wound care quality improvement initiatives have focused on wounds that are considered to be largely avoidable such as pressure ulcers (Englebright et al., 2018; Padula et al., 2015; Riemenschneider, 2018; Sutton, Link, & Flynn, 2013). There have been very few studies or initiatives that have focused on improving the wound care delivered to people experiencing mental ill health (Ray. Samuriwo & Hannigan, 2019). One of the few such projects was undertaken by James (1997) more than 20 years ago, and which focused specifically on reducing the number of pressure ulcers in people receiving mental health care. Since then, there has been a relative dearth of reported quality improvement initiatives or studies, including into the nature and extent of wounds in people experiencing either short or long-term mental health difficulties. In a Scottish study (Coull et al., 2014) which explored the substance misuse of 20-44 year olds that had used intravenous drugs it was found that collectively this group of 200 people had 87 wounds including leg ulcers, acid burns and other chronic wounds as well as 90 abscesses. It must be noted that some of the people that took part in this Scottish study (Coull et al., 2014) had more than one wound and it is unclear

how many of them developed their wounds as a result of intravenous drug use. In the substance misuse field, where many people will both use drugs and live with mental health difficulties, this Scottish study (Coull et al., 2014) suggests that large numbers of people using services have wound care needs which are going unmet.

There are some case studies (Butcher, 2000) in which the holistic assessment and treatment of people experiencing mental ill health with complex wounds are reported to have resulted in improved wound related outcomes and facilitated recovery from mental illness. Comprehensive and holistic assessments are especially important in planning and delivering care to people experiencing mental ill health who also inject intravenous drugs as they ensure that additional factors relating to their drug use that impact on wound healing are taken into account in their treatment plans (Geraghty, 2015). Some have argued that the difficulties of people that have suffered self-inflicted burns can only be met through an evidence based, holistic approach to assessment and treatment in relation to their combined mental health and wound care needs (Cleary et al., 2018).

We also note that the wound care of people experiencing mental ill is currently organised in a fragmented manner, as it traverses two distinct communities of practice each with its own set of policies, priorities and domains of practice (Ray. Samuriwo & Hannigan, 2019). Understanding this is important before care can be improved, and this takes us to a consideration of the system features militating against joined-up care.

Complex systems, wicked problems and problems of many hands

Health care is often delivered in complex adaptive systems in which the care that patients receive is shaped by the labyrinthine interplay of a wide range of processes, factors and agents (Best et al., 2012; Committee on Quality of Health Care in America & Institute of Medicine, 2001; Plsek & Greenhalgh, 2001). The complexity of delivering health care is reflected in contemporary discourse about mental health care policy, organisation and delivery which includes the emerging view that the mental health care system faces multiple 'wicked problems' (Ben. Hannigan & Coffey, 2011). Wicked problems are complex, multifaceted, and defining the priorities for addressing them at a system level is challenging or contested due to differing values, perspectives or interests (Brimble & Jones, 2017; Ben. Hannigan & Coffey, 2011; Rittel & Webber, 1973). Wicked problems are unique, subject to peculiarities of context and relatively intractable with the problem and its possible solutions inseparably intertwined (Brimble & Jones, 2017; Rittel & Webber, 1973). The solutions to wicked problems often require a system level approach that takes due cognisance of the complex context in which care is being delivered, and involve working in partnership (including with people receiving care) whilst ensuring effective teamwork that transcends organisational and professional boundaries (Ben. Hannigan & Coffey, 2011; Rittel & Webber, 1973).

Whilst all health care systems are complex (Best et al., 2012; Committee on Quality of Health Care in America & Institute of Medicine, 2001; Plsek & Greenhalgh, 2001), the mental health field is arguably more complex than most (Ben. Hannigan & Coffey, 2011; Weaver, Coffey, & Hewitt, 2017). Ideas are contested, responsibilities are shared and limited evidence is available to guide interventions and service improvements. Improving mental health and wellbeing also means addressing the causes of distress which have their roots in social conditions, including (as examples) poverty, unemployment and housing insecurity. Each of these is a wicked problem in its own right,

underscoring the importance of joined-up action which crosses governmental, organisational and professional boundaries. Against this background of overall system complexity and wicked problems, wound care for people experiencing mental ill health is also an exemplar case of a 'problem of many hands' (Aveling, Parker, & Dixon-Woods, 2016; D. F. Thompson, 1980, 2014). This has implications for establishing what can be done to improve care through policy and practice improvement.

A problem of many hands arises in circumstances in which a number of multifaceted factors and individuals contribute to a specific outcome but the plethora of people involved conceals the level of individual agency and responsibility in relation to the specified outcome (Aveling et al., 2016; D. F. Thompson, 1980, 2014; van de Poel, Nihlén Fahlquist, Doorn, Zwart, & Royakkers, 2012). In a problem of many hands, agency and responsibility can only be established when acts of commission or omission by a person are shown to be a causal factor in relation to a specific outcome and these acts of commission did not arise as a result of compulsion or ignorance (Aveling et al., 2016; Dixon-Woods & Pronovost, 2016; D. F. Thompson, 2014; van de Poel et al., 2012). A diverse range of evidence (Happell, Platania-Phung, & Scott, 2013; Howard & Gamble, 2011; Robson, Haddad, Gray, & Gournay, 2013) has highlighted the significant association between mental illness and physical ill health, a tendency by healthcare professionals to overlook the physical health needs of people with serious mental illness and higher rates of co-morbidity in people with a serious mental illness than in other members of the population. The challenges that exist in relation to wound care are similar to the reported challenges in relation to other aspects of the physical care pf people with a mental illness. There are concerted efforts to improve many aspects of physical care of people with mental illness in all care settings (Centre for Mental Health, 2013; Lord Carter of Coles, 2018; Royal College of Psychiatrists, 2013). However, these efforts do not appear to have extended to the wound care of people experiencing mental ill health. This is an unfortunate oversight as the delivery of mental health care in contemporary society is complex (Ben. Hannigan & Coffey, 2011) and wounds often arise through an interplay of causative and contributory factors (R. Samuriwo, 2017; Ray Samuriwo, Williams, Cooper, & Carson-Stevens, 2016). The physical care of people with a mental illness is a complex problem that requires system level solutions because these two elements of patient care are delivered by disparate teams of health care professionals in different locations which tends to deleterious impact on the continuity of care and the individual's care trajectory (Richard, Sheila, & Hoehn, 2009). However, this argument has not as yet been considered specifically in relation to wound care. It is imperative therefore, to consider what impact the disparate organisation and delivery of health care professionals in relation to wound care has on the continuity of care and care trajectory of people experiencing mental illness.

The care trajectory is the manner in which a person's health and social care needs unfold, how health and social care work is organised and undertaken to address these needs as well as the impact of the nature and organisation of this work on everyone that is involved (Davina. Allen, 2016; Davina Allen, 2018; Corbin & Strauss, 1991). In the case of the provision of wound care to people with mental health issues, the manner in which this is delivered is complicated by the fact that frontline staff, notably mental health nurses and tissue viability nurses; are employed in very different care settings. This organisational divide makes care susceptible to fragmentation and other shortcomings, with care trajectories at risk of unfolding in particularly complex ways reflecting differences in practitioners' jurisdictions and the fact that care is provided across distinct communities of practice. This is highlighted by the fact that mental health nurses often lack the relevant knowledge and skills to treat the wounds of a client (Day, Moriarty, & Tremayne, 2007;

Hemingway et al., 2013), while nurses specialising in physical care, and tissue viability nurses, may have little insight into the mental health care needs of the person whose wounds they are treating. Colocation of services may be one way of tackling these divides, but problems of many hands of this type reflect the more general ways in which services are necessarily organised along specialised lines. Concentrations of expertise bring benefits so that, for example, people living with mental health problems have access to rich repositories of interprofessional mental health knowledge and skill. Complexity increases when care trajectories draw on the time and expertise of practitioners in different communities of practice. Planning for care in these circumstances must take account of people's complete constellations of need and the imperative to fully coordinate services.

Care planning

Care planning is considered to be a key element in the delivery of individualised comprehensive mental health care, taking in the person's multifaceted health and social care needs (Coffey, Hannigan, & Simpson, 2017; Cranwell, Polacsek, & McCann, 2017; Doody, Butler, Lyons, & Newman, 2017). Effective mental health care plans are co-produced by the person receiving care, the care recipient's family or carer as well as by health and social care professionals through a collaborative partnership in which there is active engagement by all parties in setting goals and objectives for recovery (Coffey et al., 2017; Cranwell et al., 2017; Fraser, Grundy, Meade, Callaghan, & Lovell, 2017; Olasoji, Maude, & McCauley, 2017). Theoretical and empirical evidence (Cranwell et al., 2017; Doody et al., 2017; NIHR, 2018) also underscores the positive impact that relatives can have on the continuity of mental healthcare which fosters recovery and an improved quality of life for the client. Conversely, a lack of involvement by the person receiving care or their family in care planning diminishes the care plan to a document used for organisational governance that does little to enhance the care experience of the individual care recipient (Coffey et al., 2017; Doody et al., 2017; Simpson et al., 2016). This in part is due to the fact that these types of care plans are erroneously perceived by some to be a proxy quality measure of the extent to which key tenets of policy are being integrated into practice (Coffey et al., 2017; Simpson et al., 2016) instead of the actual quality of care delivered, which diminishes care plans to little more than an artefact of ceremonial compliance.

The development and updating of individualised care plans is an integral part of health care practitioners' work because of its presumed impact on the quality and safety of care that clients receive (Attfield, Brown, Carter, & Callaghan, 2017; Ball, Murrells, Rafferty, Morrow, & Griffiths, 2014). This is because person centred care plans provide professionals with the information and guidance that they need to make the most appropriate judgments and decisions about the care of patients. Recent research (Simpson et al., 2016), however, shows how care plans in community mental health services are rarely consulted once written, and are not always created in collaborative ways which actively involve service users . Care coordinators, tasked with the job of constructing and overseeing care plans, also face substantial administrative burden to get their work done (B. Hannigan, Simpson, Coffey, Barlow, & Jones, 2018). The process of delivering wound care is multifaceted, involving the gathering and integration of information and selecting the most appropriate measures or courses of action (Gillespie & Paterson, 2009; Lamb & Sevdalis, 2011; Ray Samuriwo & Dowding, 2014). Nurses' judgements and decisions are largely determined by their interpretation of the client's need and the prevailing clinical context (Dowding & Thompson, 2009;

Tanner, 2006; C. Thompson et al., 2008; Trenoweth, 2003). Consequently, the nature and quality of skin and wound care that a client receives is influenced by the ability of the practitioner to collate pertinent information with due consideration of the patient's wishes, and simultaneously utilise their cognition and expertise to make an appropriate judgement or decision (Stephens, Bartley, Betteridge, & Samuriwo, 2018). In the case of care planning for people with coexisting mental health and wound related problems different types of expertise are needed, and the sharing of knowledge and collaboration across professional boundaries are essential to the provision of integrated care.

The wound care of mental health service users is often overseen by mental health care nurses and tissue viability specialist nurses who work separately to deliver care that promotes recovery from mental ill health or wound healing respectively (Ray. Samuriwo & Hannigan, 2019). Mental health and wound healing nurses have a shared focus on delivering the best possible healthcare related outcomes for mental health care service users, but these two professions have disparate professional identities and jurisdictions, which delineate their boundaries of practice (Ray. Samuriwo & Hannigan, 2019). Therefore, our conceptualisation of the wound care of people experiencing mental ill health as a wicked problem of many hands provides a useful nexus for efforts to improve this aspect of healthcare through policy and practice. Perhaps then, a pragmatic first step in improving care planning predicated on our conceptualisation and informed by systems thinking would be to ensure that care coordinators work collaboratively with mental health nurses, tissue viability nurses and clients to develop bespoke care plans that facilitate recovery and wound healing.

Conclusion

This paper serves as an analysis of the challenges of delivering wound care to people experiencing mental ill health across organisational and professional boundaries, in a larger system context which is complex and interrelated. This exegesis has highlighted the merits of conceptualising wound care for people with a mental illness as a problem of many hands, arising in a complex system with wicked problems. The importance of using the principles of justice, equity and fairness to inform and underpin health and social care policy in relation to universal human needs such as healthcare has long been established (Blakemore & Warwick-Booth, 2011; Royal College of Psychiatrists, 2013). The shortcomings in the wound care of people experiencing a mental illness are untenable as they contravene the global consensus on the delivery of high quality patient care in a safe, just and equitable manner (WMA, 2016; Wyatt, Laderman, Botwinick, Mate, & Whittington, 2016) and the UK consensus on parity of esteem with regards to the physical care of people receiving mental health care (Centre for Mental Health, 2013; Lord Carter of Coles, 2018; Royal College of Psychiatrists, 2013).

The challenges that exist in relation to the quality and safety of wound care that is delivered to people experiencing mental ill health highlight the need for more than a policy fiat that adumbrates the imperative for parity of esteem in the physical and mental health care of people experiencing mental ill health and psychological distress. Instead, it may be more prudent and pragmatic to develop policy that also informs and underpins specific tenets of the physical care of patients that are experiencing mental ill health. A considered system level approach to improving the quality of care delivered to people with a mental illness is of cardinal importance because the nature of health care is such that it is delivered in contexts that are complex, adaptive and multifaceted (Haffeld, 2013; Ben. Hannigan & Coffey, 2011). An integrated care approach which the mental and physical

health needs of people with a mental illness has been shown to result in improved client outcomes (Happell et al., 2013). Studies (Howard & Gamble, 2011; Robson et al., 2013) have established that mental health nurses can deliver care that meets the physical health needs of people with a mental illness if they are provided with the appropriate training, support and supervision. In light of this evidence, it may be more apt at a system level to implement policies that enable mental health nurses and tissue viability nurses to work collaboratively to consistently plan and deliver high quality wound care. Therefore, further research is needed to inform comprehensive policy which underpins key elements of the physical care of people experiencing mental ill health such are wound care. This is important because the generation of robust empirical and theoretical evidence is integral to the development of quality improvement efforts that enhance the health related outcomes of populations (Jamison et al., 2015; Ray. Samuriwo, 2018; Yamey & Morel, 2016).

It is our hope that the insights that have been shared in this paper will inspire colleagues in wound healing and mental health nursing to think about how they might work collaboratively to improve the quality of wound care that is delivered to people receiving mental health care. We would also encourage colleagues to conceptualise the wound related care of people experiencing mental ill health as a wicked problem of many hands that can only be addressed through an integrated holistic approach to care delivery.

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