ORIGINAL RESEARCH

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Stress in NHS staff triggers defensive inward-focussing and an associated loss of connection with colleagues: this is reversed by Schwartz Rounds

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Abstract

Background: The aim of this case study was to examine the impact of Schwartz Rounds on staff wellbeing and patient care.

Methods: A series of interviews were conducted with staff, regarding stress. The key themes, which were extracted using Grounded Theory, were used to inform the development of a new measure, 'The Organizational Response to Emotions Scale'. This was administered at the beginning and end of Schwartz Rounds.

Results: Analysis of the results revealed a significant reduction in attendees' appraisal of emotional labour and an increase in reflection. This was associated with a reported upsurge in feelings of interconnectivity and compassion towards colleagues. More traditional forms of individualised staff support were in contrast, viewed as unhelpful. In particular, the offer of counselling sessions was resented by many staff because it carried the implicit message that the problem arose from a deficiency or weakness within them. New performance management policies compounded this problem and left many feeling blamed and punished for their stress. A referral to Occupational Health was widely seen as an index of failure; a sign that they could not cope.

Discussion: Attendance at the Schwartz Rounds helped staff to recognise that their feelings were normal in the context of a highly-pressured healthcare system. Eradicating the stigma associated with emotional responses should help to improve organizational culture. It may also help to address an emerging phenomenon that was identified within this study, namely that staff had begun to hide their feelings from their managers. In the longer term, this could serve to mask the true extent of stress and burnout within the NHS.

Conclusions: The findings suggest that Schwartz Rounds may indirectly improve the quality of patient care by addressing the stress-induced cognitive narrowing and decline in empathy that precedes withdrawal; the process that is a likely forerunner of dehumanization. An additional finding was that the line manager played an important mediating role of containment. This, in turn, appeared to influence the level of support that staff provided to each other.

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Background

The focus of this study is Schwartz Center Rounds®, a multidisciplinary forum for group reflection [105]. The introduction will begin with an overview of the political policy contexts that have driven the expansion of this new form of staff support.

Schwartz Center Rounds, known as ‘Schwartz Rounds,’ in the UK, [22] were conceived by ‘The Schwartz Center for Compassionate Healthcare’ in 1997. The centre was founded two years earlier by a Boston healthcare lawyer, Kenneth Schwartz, in the weeks prior to his death from lung cancer. During his treatment, Schwartz noticed that frontline staff varied in their ability to display compassion towards him [100]. He concluded that the high pressure environment of a hospital can ‘stifle inherent compassion and humanity’ ([97], p.3).

The aim of Schwartz Rounds is to preserve the ‘human connection’ in healthcare by providing staff with space to reflect upon their work. Sessions last for one hour and are open to all staff, clinical and non-clinical. They begin with a panel presentation of stories which focus upon a particular theme, for instance ‘the patient I will never forget’. The discussion is then opened up to the audience. Two trained facilitators encourage people to focus upon their thoughts and feelings, rather than engage in problem solving.

The expansion within the NHS

Schwartz Rounds were piloted in the UK by The Kings Fund [46, 45] during 2009–2010. Their status was bolstered by the Francis Inquiry report [39] which recommended them as a means to promote a sense of there being ‘one team for the patient’ ([39], p.1397). Later that same year, the government awarded a grant of £650,000 to the Point of Care Foundation, the licenced provider of training and support for Schwartz Rounds, to expand the scheme (Department of Health, [29]). By January 2016, they were being hosted by over 120 trusts and hospices.

The organisational context

In 2014, the acute trust within which the author works, failed its Care Quality Commission (CQC) inspection for the first time [17]. Although critical care was rated as ‘good,’ inspectors unearthed longstanding cultural issues, including high rates of bullying and blame. They also noted a damaging disconnect between the senior leaders and the frontline staff. A series of ‘listening events’ subsequently conducted by the executive team, revealed that staff also felt disconnected from each other.

The personal learning, which shaped the study

In 2014, 360° feedback, completed for the author’s leadership training, highlighted that she had become progressively

more task-focussed, concomitant with increases in her responsibilities. This had culminated in her withdrawal from the team. The feedback served to raise the author’s awareness of a hitherto unconscious and insidious relationship between her mounting stress levels and her increasingly detached leadership style. She responded by taking steps to ensure that she was more accessible to her team. She also sought to improve the level of emotional support for staff, by joining the steering committee for Schwartz Rounds.

Observations during the Schwartz rounds

The author came to notice parallels between her experience of critical reflection and those who attend the Schwartz Rounds. Hearing the self-disclosures of other staff within the organization appears to trigger an epiphany for many attendees. They come to realise that their experience of stress is not unique to them or their immediate team, but is shared. Comments suggest that this gives rise to an increase in compassion and ultimately, a stronger collective identity.

Overview

Summary of the approach

This was an interpretivist study. The author conducted interviews with members of her organization about their feelings of stress. The findings were used to develop a questionnaire, entitled ‘The Organizational Response to Emotions Scale’ (Additional file 1: Appendix 1). This was administered at two time points; the start and end of the Schwartz Rounds. The aim was to capture shifts in feelings or beliefs that might accompany a more collective perspective.

Theories that have informed the approach

The study was informed by theories of emotional labour [52, 60], and stress [54]. The author also drew upon the social psychology literature, including work on depersonalization [108] and dehumanization [18].

Aims and objectives

The overall aim of this study was to examine whether Schwartz Rounds promoted the well-being of staff and reduced the stress inherent in their work.

Objective one

To examine levels of staff stress in the author’s trust before and after the implementation of Schwartz Rounds.

Objective two

To examine the way in which staff describe their feelings of stress, before and after their attendance at the Schwartz Rounds. The findings will be considered in the context of the implications for patient care.

Objective three

To examine the way in which staff feel about their colleagues, before and after their attendance at the Schwartz Rounds. Reported levels of interconnectivity may serve as an index of withdrawal and ergo, hold significance for patient care.

Case study structure

The case study will begin with a literature review on the psychological defence mechanism of withdrawal, in the context of healthcare. The methodology section details the mixed methods approach that the author employed in the study. This helped to reveal new insights into the way in which stress shapes relationships between staff. During the final discussion and conclusion sections, the implications of the findings are discussed in respect of wider organizational and political contexts.

Literature review

The psychological defence of withdrawal was first brought to the public's attention by The Francis Inquiry [39] into Mid Staffordshire NHS Foundation Trust. Scores of patients died unnecessarily as a consequence of neglect. A contributory factor was the behaviour of frontline staff. Nurses were found to be preoccupied with activity and performance data [27, 63]. Disturbingly, many had also become detached from their caring role and appeared desensitised to the needs of vulnerable people under their care [13, 107].

Sir Francis concluded that the behaviour of the staff was a manifestation of a toxic and dysfunctional culture [39]. At the heart of this lay systemic failures of leadership [88]. It emerged that managers had overlooked significant staff shortages [14]. At the same time, they had routinely employed pace setting and top-down techniques to 'inculcate staff' [10] into prioritising organizational targets [25]. In a large number of cases, their methods had spilled over into bullying and blame [2]. Francis [39] argued that sustainable culture change would only be realized if the NHS adopted compassionate and collegiate styles of leadership. A subsequent report on patient safety conducted by Professor Don Berwick [11] echoed these sentiments. Berwick concluded that leaders should 'abandon blame as a tool and make sure pride and joy in work, not fear, infuse the NHS' ([11], p.5).

The tabloid media initially overlooked the fact that staff had suffered too and lambasted the nurses for having 'stopped caring' ([23], p.1). Keen to allay the public's fears, the government hastily announced plans to mandate compassion [113] and criminalise neglect [9]. However, this response was later roundly criticized for compounding the demonization of staff [109]. It was also naïve because it served to address the symptoms of the problem, rather than the deeper cause.

The need to improve the quality of care is indisputable. However, as will now be illustrated, focussing vigilantly upon the needs of people who use the NHS is only one part of the solution.

A narrow focus upon the recipients of care

In October 2014, NHS England, under Sir Simon Steven's stewardship, published the much-lauded Five Year Forward View [85]. The document highlighted that the NHS remained too preoccupied with disease-based care and needed to realign itself to focus on prevention. It argued that the success of this would hinge upon staff adopting person-centred models of care.

The central message is not in question. However, it must be considered in the context of the fact that up to 75 % of change initiatives within the NHS are thought to fail to achieve their objectives [8]. A glaring omission, which threatens to consign the Five Year Forward View to the same fate, is that it did not address whether frontline staff have the skills [93], emotional resources and support to provide a higher degree of relational care.

Staff within health and social care sectors are known to experience significantly greater levels of work-related stress, when compared to other professional groups [58]. The picture appears to be getting worse: figures released under the freedom of information act in 2015, revealed that absence due to mental health difficulties has doubled in recent years [87]. This equates to a loss of 1.6 million working days [12] with an estimated cost of £2.4 billion per annum [92].

Exposing an organizational blind spot

In the same month that the Five Year Forward View [83] was published, the CQC announced that they would be transforming their regulation process (CQC, [17]). The organization had faced criticism in the wake of the Francis report that it was too 'light touch' ([15], p.1) to detect a problem similar to that found at Mid Staffordshire [1]. The new framework, which was based on the work of Professor Michael West at The Kings Fund, awarded a higher priority to staff wellbeing and included an assessment of staff engagement for the first time [112]. This shift in focus, coupled with increasing evidence that staff wellbeing is an antecedent, rather than a consequence of quality care [70], helped to raise awareness of the implications of staff stress at a policy level [83].

In 2015, NHS England and NHS Employers responded by launching a range of initiatives, including improved nutrition and fitness schemes [84] and a self-help 'emotional wellbeing' toolkit [82]. Although these are a step in the right direction, they do not go far enough. At the heart of the problem is that they place the 'locus of the

disturbance' (Balme et al., [4], p1) upon the individual. In doing so, they fail to pay due regard to the role of wider social and organizational issues ([66], Sawbridge, 2015: Email communication); the key factors that were highlighted within the Francis report [39].

This individualistic approach to staff wellbeing within the NHS is unfortunately longstanding. In the 1980s and following the advent of the internal market, mental ill health amongst employees tended to be viewed as indicative of 'neurotic tendencies' (Rose, 1982 cited in Bamber, [5], p4). In recent years, attention has shifted to staff members' response to providing direct patient care.

The provision of care: the source of the stress?

The notion that nursing staff dehumanize and distance themselves from those under their care was introduced by the psychoanalyst Menzies Lyth, in 1960 [77]. Following a four year ethnographic study within a teaching hospital, she argued that nurses employed unconscious defence mechanisms in order to cope with the 'primitive anxieties' ([77], p.452) aroused as a consequence of working with people who were ill or dying. Critically, she also asserted that the 'defence system' (p.453) within the hospital, not only failed to address the nurses' anxiety but, by failing to provide them with sufficient reassurance and satisfaction, it also created secondary anxiety. Although the findings were acclaimed by scholars within her field, they did not translate into meaningful changes for staff. In 2009, Lawlor suggested that this was because Menzies Lyth did not, 'address adequately what to do about it' [the anxiety] ([64], p. 528).

A more contemporary theory of staff withdrawal, which has achieved broader appeal, is that provided by the theory of 'emotional labour' [52, 60]. This has been defined as, 'Suppressing private feelings, in order to show desirable work-related emotions' ([76], p.4). A key tenet of the theory is that service workers are routinely subjected to regulation and control of their feelings, emotional expression and personality [52, 60]. The control is asserted by managers via the reinforcement of 'display rules' (Ekman and Friesen, 1969, cited in [98]). An example of this would be a nurse displaying patience and compassion, in the face of incivility from a family member.

Over time, the mismatch between expressed and felt emotions is thought to lead to 'emotional dissonance' [118] and ultimately, emotional strain. This, in turn, increases the risk of burnout, characterised by feelings of emotional exhaustion, reduced professional efficacy and cynicism (Maslach et al., [74]). In parallel with Menzies Lyth's [77] ideas, staff are seen to withdraw from patients and depersonalize or objectify them, in order to cope [47].

Emotional labour and Schwartz rounds

An important premise of Schwartz Rounds is that the sessions promote compassionate care by supporting

staff with the 'emotional aspects of their work' ([105], p.1). To date, this has however, proven difficult to evidence. Although two pilot studies suggest that Schwartz Rounds can yield improvements in compassionate care [69] and team working [46, 45] these studies are beset with methodological flaws and weaknesses and, as such, are not seen as 'robust' ([71], p.2). This may pose a risk to the future sustainability of this form of support. Another issue, as highlighted by Lloyd et al. ([68], p.182) is that if we do not understand how or why an intervention works, we are unable to 'maximise its effectiveness'.

It is possible that a barrier to explicating what is happening within the Schwartz Rounds is the focus upon emotional labour. Observations suggest that the theory is not able to explain the depth of the changes that staff report anecdotally. Another issue, which might undermine its applicability for healthcare more generally, is that emotional labour does not capture the complexity of the relationship between the provision of care and the feelings of burnout that lead to withdrawal. The relationship is clearly not linear. Staff who have an insecure attachment style [40, 65] and previous experience of trauma [81] appear to be more vulnerable to burnout. Moreover, wider aspects of organisational culture has been found to play a much greater role in the development of burnout, when compared to patient care [110] or individual factors [49].

Lastly, the theory of emotional labour cannot account for 'interactive' factors. As highlighted by Tang [103], this encompasses;

'...how the behaviour (and emotions) of the different parties to the interaction, e.g. the manager, colleagues and the recipient both interpret *and* affect the emotional labourer and their performance' ([103], p.18).

As will now be discussed, emerging research suggests that the therapeutic processes that are at play during the Schwartz Rounds might be better explained by more basic psychological model of stress.

Stress: the precursor to withdrawal

The experience of stress has been defined as:

'The psychological and physiological state of a person responding to demands that stressors in an environment place upon them (i.e. strain) under conditions where those stressors are perceived to be threatening to the self and well-being' ([54], p.355).

This quote is helpful because it draws attention to the fact that an individual's experience of stress is mediated by their appraisal of it. This can be understood more

clearly if we recognise that the primary evolutionary function of stress is self-preservation [101]. What has not hitherto not been recognised, although makes intuitive sense, is that this brings with it a reduction in compassion for others.

Psychologists have known for some time that anxiety triggers changes in brain activation (Arnsten, [3]). This apparent evolutionary survival response is adaptive in some circumstances because it leads to a narrowing of focus, evidenced by improvements in selective attention [96]. In 2015, Todd and colleagues further elucidated this process, by demonstrating that feelings of stress also heighten 'self-focussed attention' ([106], p. 375) which, in turn, undermines perspective taking. Converging research subsequently revealed that this acquired egocentrism is associated with a reduction in empathy for others [73].

A possibly related issue, that does not appear to have been addressed by the literature to date, is the feeling of threat that might arise from the experience of stress itself. Evidence from mental health research suggests that this is likely to be shaped by cultural perspectives [50]. People who are from 'collectivist cultures', such as China ([94], p. 13) tend to use situational explanations for human behaviour [75]. In contrast, individualistic cultures, such as North America and Western Europe, are more likely to emphasise 'personal causality' ([94], p. 13). These differences are reinforced by the media [78].

This has relevance for the current study. It seems reasonable to suggest that a situational appraisal of stress would not represent a threat to personal identity and therefore, may be less likely to trigger withdrawal. The opposite scenario can be imagined for dispositional attributions of stress.

Putative new theory to explain the benefits of Schwartz rounds

Comments made by attendees at the Schwartz Rounds indicates that hearing others' self-disclosures helps them to shift from dispositional, to more situational appraisals of stress. They come to recognise that stress is normal in the context of a highly pressured and often poorly resourced healthcare service. This disconfirmatory evidence helps them to challenge the beliefs that underpin and maintain their withdrawal, for instance, 'Everyone else is coping; I am the only one who is struggling'. It may also alleviate a potent secondary source of anxiety; the fear of negative social evaluation [31, 32]. This self-perpetuating process is outlined in Fig. 1.

Reduced empathy for others is considered to lie 'at the heart of dehumanization' ([18], p.1). It is conceivable that the increase in interconnectivity and compassion that is reported by attendees of the Schwartz Rounds, would translate into important benefits for patient care. This is likely to operate indirectly. An improved sense of cohesion should lead to an associated increase in social

support and a concomitant reduction in anxiety. Over time, this should result in fewer instances of withdrawal.

In the following sections of the case study, the author will outline the approach that she took to exploring these concepts.

Methods

The focus of the research was interpretivist. This philosophical position argues that humans cannot be measured in the same way as scientific matter. As highlighted by Porta and Keating ([91], p.25), human behaviour is 'filtered by the subjective understandings of external reality' on the part of the people who have agreed to be studied, but also by the researchers themselves. It is for this reason that a myriad of beliefs and values can be reported, in relation to the same phenomenon [48]. Interpretivists argue that only qualitative techniques permit the deeper and more complex level of enquiry that is required.

The case study

An exploratory case study methodology was used in this investigation. Case studies have been defined as 'multi-perspectival analyses' ([104], p.1). This refers to the fact that the researcher takes into account the statements and viewpoint of the participants, but also of other relevant people, and the interaction between them [35]. This approach is particularly useful when an in-depth and holistic analysis is required [53].

Exploratory case studies are useful when the intervention being evaluated has 'no clear, single set of outcomes' (Yin, 2003, cited in [6], p.548). This was

appropriate because the author did not have a clear understanding of the sources of stress for staff. Furthermore, no previous study had attempted to capture changes in emotions and beliefs as a consequence of attending the Schwartz Rounds.

The research process

As outlined in Fig. 2, the case study was conducted over a seven month period.

Ethics

The research department in the author's trust classified the study as a 'grey area' project. She was required to complete a mandatory application form (Additional file 1: Appendix 2) and a research proposal (Additional file 1: Appendix 3). The study was approved and signed off by the Caldicott Guardian and the medical director of the trust on 13 November 2015. It was approved by the research department on the same day (Additional file 1: Appendix 4).

Data collection

The author employed a mixed methods approach to data collection and both primary and secondary data were used. The term 'mixed methods' refers to a growing trend within social and health research, to combine or integrate multiple data sources within one investigation. Also referred to as 'triangulation', this process can help to corroborate findings. It can also generate a deeper and more complete understanding of the area of study [36].

The design of the study was 'exploratory sequential' [24]; findings from qualitative data collection were used

Fig. 2 Gantt chart depicting timeline of the case study

to inform the development of a new instrument; the ORES. The resulting data were then analysed using quantitative methods.

In the following section, the process of obtaining the secondary data will be outlined. The procedure for the collection and analysis of the qualitative and quantitative data will then be detailed respectively.

Secondary data collection

In November, 2015, the author met with the CEO of the trust to seek his permission to access the staff stress data for all clinical and non-clinical staff. He subsequently contacted the occupational health department and provided his approval. The 2015 staff survey results were downloaded from the Picker Institute Europe, via their website on 23 February 2016 [90]. These were compared with the 2014 results, published on 24 February 2015.

Qualitative data: interviews with nurses and healthcare assistants (HCAs)

The author attended the nursing handover on an acute ward within the hospital. She discussed the aims and objectives of the case study and the purpose of the interviews. She specified that the responses would not be recorded and that interviewees' identities would remain confidential. The author took the decision not to record the interviews on the basis of the high rates of bullying within the trust. It is likely that staff would have felt inhibited, had there been a risk that they could be identified.

The author placed a poster in the nurses' station which detailed four interview dates. Two were on a Monday and two were on a Friday. Many of the nurses and HCAs work long shifts, either at the beginning or end of the week. It was hoped that the separate sessions would enable as many staff to attend as possible. The interviews were held in the staff room on the ward at 2 pm. Staff had identified this as a quieter period for the wards.

Interview questions

The nurses and HCAs were asked to discuss the following issues:

1. You and your colleagues' experience of stress.
2. The factors that help to reduce your feelings of stress at work.
3. The factors that increase your feelings of stress.
4. Changes that the organization could make to support staff wellbeing.

Analysis of the interviews

Principals of adapted Grounded Theory (Glaser and Strauss, 1967, cited in [62]) were used to analyse the

data from the interviews. Grounded Theory is an inductive methodology which supports the systematic development of theory. This is in contrast to deductive methodology, which uses pre-determined theories to shape the analysis [115]. Grounded theory is helpful when little is known about the area of investigation [79]. It was therefore appropriate for the study of Schwartz Rounds.

Coding and the generation of themes and categories

As detailed in Fig. 3, Grounded Theory involves several important procedures. The initial step is to complete 'open coding'. This required the author to scrutinise the verbatim comments that she had noted whilst the interviewees were speaking. Similar responses were grouped by assigning 'codes' or labels to capture broad concepts, for example, 'A lack of consultation'.

In the second stage of the analysis, known as 'axial coding', the author began to refine the data and identify connections between the categories [30]. This was achieved by the 'constant comparative method' [44]. This is an iterative process which involves comparing all new

Fig. 3 Grounded Theory ([59], p.614)

incidents, with those previously coded. Over time, this enables researchers to cluster open codes around 'axes or points of intersection' ([57], p.5). During the third 'selective coding' stage, the author identified the 'central concept': the core phenomenon that ran through all of the categories (Glaser and Strauss, 1967, cited in [43]).

The risk of bias

Interpretivists acknowledge that researchers can never truly put aside their biases and achieve impartiality [95, 111]. With this in mind, Dobson [33] recommends that the route to being an ethical researcher is to be open about one's values and motivations. This can help to safeguard against personal prejudices which might have a bearing on the interpretation of the data [99].

The author was conscious of the fact that the focus of the study was inspired by her own personal experience. This carried the risk that she would over-identify with the data. In an effort to address this, she discussed the research aims and objectives with her colleagues within an action learning set. The feedback that she received focused upon the differences between her and the interviewees. This underscored the importance of viewing the themes that emerged through their eyes, rather than her own.

Reflexivity includes the need to consider how we are perceived. This includes 'the context within which we engage, as well as our role and specific mandate' ([41], p.41). Three of the nursing staff were known to the author, a factor that may have had relevance to the data collection and analysis. It is also likely to be relevant that she was more senior than the staff she was interviewing. This factor might have inhibited some people. Conversely, others may have viewed her as having the power to change working conditions and so may have overstated some points. She was mindful of this during the coding stage of the research.

Quantitative data collection: the ORES questionnaire

The themes that emerged from the interviews were used to develop a pilot questionnaire, 'The Organisational Response to Emotions Scale' (ORES). The aim of the ORES was to determine whether it might be possible to capture and examine what was being stated anecdotally by attendees; i.e. that the group reflection elicited by the Schwartz Rounds led to changes in the way that people felt regarding their stress. The components of the ORES are detailed in Additional file 1: Appendix 5.

Procedure

A free lunch is made available to participants half an hour prior to the start of the Schwartz Rounds. The author used this time to recruit participants. She handed a written overview of the study to all attendees as they arrived. This stated that the forms would only be seen by

the author and that the data would be stored on a secure server. After 10 min, they were approached again to see if they would be willing to complete the questionnaires at two time points; the start and end of the Schwartz Rounds. At the time of the study, the sessions were held in a hospital site that was unfamiliar to the author. The staff were therefore not known to her.

The ORES asks questions that could trigger feelings of distress in some staff. With this in mind, the author produced a staff support information sheet which lists sources of online and face to face emotional support. It was also published on a 'staff support' section of the trust website.

The author also asked the HCAs and nurses who participated in the interviews to complete the ORES. The rationale for this was to gain a sense of whether their experience of stress was representative of the wider workforce.

Analysis

The results of the ORES were analysed using the statistical package 'SPSS'. A repeated measures ANOVA was used to compare scores before and after the Schwartz round. The model also included an indicator for whether it was the attendees' first round, the length of time that they had been in their role and the session attended. Interaction terms were also included to determine whether any of these factors were associated with the degree to which scores changed after the Schwartz Round.

Strengths and limitations of the methodology

The greatest strength of the methodology is that it permitted detailed analysis of individuals' experience of stress. The fact that the ORES was administered immediately before and after attendance at the Schwartz Rounds helped to control the risk of confounding variables, thereby increasing the internal validity of the results.

One limitation was that the Schwartz Rounds were held in a trust which had recently been placed in special measures. This is known to be associated with an increase in work-related stress [34]. It is possible therefore that the staff may not have been representative of the wider NHS workforce. An additional limitation was that the interviewees were self-selected, raising the possibility of bias [42]. Those who opted to attend may have been the staff members who were feeling most stressed or frustrated with the organization.

Results

Secondary data: staff stress data collected by occupational health

As outlined in Additional file 1: Appendix 9, a total of 137 days was taken off in the 12 month period (January to December 2014), with a mean score of 15. The six

month data (April to December 2015) suggests an increase in sick leave with a mean score of 20 days. This is higher than the national average of 15 days for NHS staff [90]. It also represents an increase when compared to the same period in 2013 (Additional file 1: Appendix 10). As previously discussed, this may reflect the impact of being in special measures.

Findings from the NHS staff survey

The 2015 staff survey results revealed some improvements when compared to the previous year (Additional file 1: Appendix 11). Staff reported improved levels of communication between senior management and staff (up by eight points). The overall engagement score also showed an increase from 3.51 to 3.66. However, rates of bullying and harassment from other staff remained high (42 %). This is much higher than the national average of 26 %.

An unexpected obstacle that came to light during the course of the research was that it was not possible to obtain sickness and staff survey results for individual hospital sites. The author was informed that the data from the multiple sites within the trust was pooled and that it was not possible to tease it apart. Schwartz Rounds were introduced to one of the hospitals as part of the Special Measures Action Plan [19]. At the time of the study, they had not been rolled out to other sites. The lack of specificity in the secondary data meant that the first objective was not met:

To examine levels of staff stress in the author's trust before and after the implementation of Schwartz Rounds.

Other initiatives that were introduced as part of the action plan, including job shadowing by the senior executives, may have contributed to the improvements in the staff survey.

Qualitative data

Interviews with the HCA and nursing staff

A total of 11 staff attended the interviews. Ten were female and one was male. They were all white British, with the exception of one nurse who was Asian Indian in origin. Their ages ranged from 30 to 59 and their mean length of time in post was 19 years (SD: 8.5-28). Two were HCAs and nine were nurses.

The following section will present the five themes that arose from the interviews. The results of the open coding stage of the analysis and axial codes and selective codes are listed in Additional file 1: Appendix 12.

1) A lack of support and advocacy

Staff reported that their most significant source of stress arose from the fact that they did not feel

considered, appreciated and supported. One senior nurse noted 'We're a caring profession but no one cares about us'. Leadership appeared to play a critical role in this. Many felt that the ward manager was too busy and under too much pressure to offer them any support.

2) Ripple effects

There was consensus amongst the HCAs and nurses that their role had become more stressful in the past two years as a consequence of a rise in incivility, aggression and verbal abuse from patients and families. They linked this to high profile cases of patient neglect and abuse that had been widely reported in the media. The staff recognised that this had left people feeling frightened at the prospect of being admitted to hospital.

The lack of line management support appeared to have important indirect effects upon how staff felt about this shift. The ward manager had repeatedly failed to address the problem with relatives; to 'nip it in the bud'. Conversely, she invested considerable effort into avoiding complaints from patients and families. This left the staff feeling that the patients had all the power. It also served to compound their feelings of not being valued or cared for.

'It needs to come from the top- from the ward manager. There needs to be values that are modelled to families by her; i.e. this is how I'd like my staff to be treated'

3) Interconnectivity and social support provides a buffering effect

The relationships within the team appeared to have an important buffering effect on the staff members' experience of stress. People reported that the support that they received was the only thing that made work 'bearable'. Similar findings were reported by the social psychologists, Haslam and Reicher [55] following a study of group behaviour. The authors found that a sense of shared identity was associated with higher levels of social support and that this helped individuals to 'resist the adverse effects of situational stressors' ([55], p.1037).

4) Occupational Health: from support to punishment

There was a consensus that changes in performance management and sickness policies in the past year had further eroded morale. They had also given rise to an increase in anxiety because the staff believed that the policies made it easier for managers to terminate the contracts of staff on competency grounds. One HCA noted, 'If your manager refers you to Occupational Health

(OH), it means that you have failed- it suggests you cannot cope'. A nurse added, 'A referral to OH is like a punishment- I dread it'.

Importantly, this had led to a reported change in behaviour. The staff stated that they avoided discussing feelings of stress or 'emotional problems' with the line manager during their appraisals, for fear that it would trigger a referral to OH. They also admitted masking work-related stress by reporting physical illnesses as the reasons for their absence from work (such as a stomach bug). This is a concerning finding because, in time, it could serve to mask the true extent of staff stress within the NHS.

5) Inadequate support

The staff reported that there is 'no such thing' as supervision within nursing. The same was true for the HCAs. Furthermore, none of the staff had ever been offered debriefing, following a death or traumatizing experience on the ward. This was juxtaposed with the fact that they often spend 12 hours a day with the patients. In contrast, allied health professionals may see individual patients only once a day, for an hour.

The principal source of emotional support offered by OH is a referral for six sessions of counselling by a private therapist; staff are matched with a therapist closest to their home. This appeared to miss the point for many of the staff who felt that the main source of their stress arose from within the organization. One nurse commented, 'It sends a message that there's something wrong with you'. Another pointed out, 'I don't *need* counselling'. The obligation to 'provide support and opportunities for staff to maintain their health, well-being and safety' is the third pledge from the NHS Constitution ([28], p115). The findings indicate that the current provision of individualised support is unhelpful. It is perhaps important to emphasise that this is not specific to the NHS, but is reflective of a wider cultural issue. Cooke and Watts [20] recently cautioned, 'Our society increasingly sees suffering as an individual, psychological issue with a technical fix' ([20], p.1). Unfortunately, the fact that staff appear to be masking their stress in the wake of the new policies is unlikely to help matters. Any apparent reduction in work-related stress levels could give a false picture about the effectiveness of the support that is currently being offered.

6) The role of patient care

None of the staff highlighted frontline care as being a significant source of their stress. One noted that the patients were 'the least of our worries'. However, they recognised that their feelings of hopelessness

and low levels of engagement would have an effect upon patient care. One nurse commented;

'I tried to make things better at the start, but I've given up. I don't make any effort now- I'm just coasting. That can't be good for patient care; I'm sure they pick up on it'.

Interpretation of the team interviews

Although the team did report emotional labour, as a consequence of having to cope with incivility, the critical mediating factor was the ward manager's failure to support them. Essentially, she was not able to cultivate an 'ethic of caring' (Brady, 1999, cited in Northhouse, [86]). This is known to be a critical ingredient in the development of trust and cooperation.

Similar themes emerged during a study by Johnston et al. [61] which tracked subjective and physiological ratings of stress in 200 nurses over three shifts. The authors discovered that both measures of stress were lower when the nurses rated themselves as feeling appreciated, valued and in control of their work. This was found to be more predictive of stress, than the type of task performed, including direct patient care.

The HCAs and nurses highlighted that the 'frontline' nature of their role meant that they were more in need of support and yet, paradoxically received the least. However, the lack of support should perhaps also be considered in the context of what carers 'bring with them' to the role (Hinshelwood and Skogstad, [51]). An increasing body of evidence suggests that a high level of compassion is born out of threats to an individual's well-being [102]. In particular, the experience of adversity [67], socioeconomic hardship [102], and past emotional wounds [26] have all been linked to the capacity to display 'compassionate responding'; defined as, 'concern for the suffering or well-being of others' ([102], p449).

A final important factor to consider is that the experience of previous adversity can give rise to 'stress sensitivity' (Bentall, [7], p. 3). This link may add weight to the 'wounded healer' theory (Jung, 1951, cited in [80]); that painful life experiences contribute to desirable qualities, such as sensitivity and empathy, but also fuel vulnerability [117]. This would appear to confer special responsibilities upon line managers.

The second stage of the research; the analysis of the ORES results will now be discussed.

Quantitative analysis of the ORES

Factor analysis

The ORES was designed to capture nine different components, using separate scales. Each component incorporates four items or more. The author planned to collect data from four Schwartz Rounds. Unfortunately,

two were unexpectedly cancelled and only 55 forms were completed. The number of subjects was too low to perform a standard factor analysis. Therefore only items which resulted in poor reliability were discarded.

Demographics

The demographic data is presented in Additional file 1: Appendix 13. There was a lack of diversity amongst the attendees. The majority identified themselves as female (91.3 %), white (87.3 %) and heterosexual (98 %). Although there was a good distribution of age within the range 20–59, only two were between the ages of 60–69.

Emotional labour

The responses to one item from the emotional labour component of the ORES is worthy of particular mention. As detailed in Table 1. there was no significant change overall, in response to this question. There was also no significant shift amongst those who had previous experience of attending the Schwartz Rounds. Interestingly however, there appeared to be a significant interaction between these two factors, meaning that the rate at which the scores changed between pre and post-round, differed between those with and without previous experience. For attendees who had prior experience of attending Schwartz Rounds, there was only a marginal decrease in their mean score on this question. In those with no experience, the mean score decreased significantly.

The significant shift that appears to occur in the first Schwartz Round may reflect the moment of ‘epiphany’ that is reported by attendees. This finding may hold important implications for future research because this shift could be missed in more established Schwartz Rounds.

Increases in self-reflection

The finding, detailed in Table 2. indicates that the attendees reflected more about the emotional demands of their job at the end of Schwartz Rounds, when compared to the beginning. Self-reflection has been shown to reduce feelings of emotional labour (Williams, [114]) and levels of self-criticism (Marin and Rotondo, [72]). It is possible therefore that this would provide protective effects against anxiety and withdrawal.

Table 1 Decreases in Emotional Labour

	Pre-round	Post-round	Post-pre	p-value
	Mean(sd)	Mean(sd)	Mean(se)	Mean(sd)
In my experience, frontline care work involves providing a high level of emotional support to people who are frightened or distressed.	6.6 (0.7)	6.3 (0.8)	−0.3 (0.1)	0.033

Table 2 Increase in self-reflection

	Pre-round	Post-round	Post-pre	p-value
	Mean(sd)	Mean(sd)	Mean(se)	Mean(sd)
I take time to reflect upon the emotional demands of my job.	5.6 (1.3)	5.3 (1.4)	−0.4 (0.2)	0.057

The results were less conclusive than anticipated. The second objective was therefore only partially achieved:

To examine the way in which staff describe their feelings of stress, before and after their attendance at the Schwartz Rounds.

Feelings towards the line manager

In both Schwartz Rounds, there was a general shift towards feeling more negatively towards the line manager. As outlined in Table 3. this reached statistical significance on one item related to instrumental aspects of leadership. Another item, relating to managers’ ability to provide support for emotional issues, was suggestive of a trend in a similar direction. Anecdotal reports indicate that the opposite pattern is seen with regards to peers; attendees discussed feeling more interconnected with and compassionate towards their colleagues.

The reflections of the attendees, coupled with the pilot data, ensured that the third research objective was achieved:

To examine the way in which staff feel about their colleagues, before and after their attendance at the Schwartz Rounds.

Stress as a precursor for the depersonalization of colleagues?

A compelling observation was made during the second Schwartz Round. The panel discussion had focussed upon the incivility and bullying that is endured by ‘unseen’ staff, such as blood technicians. A recurring theme, which ran throughout many of the subsequent reflections, was that clinical staff had limited awareness of the pressures facing their non-clinical colleagues. One doctor noted that this, coupled with a stress-induced ‘narrow viewpoint’, cultivated

Table 3 Shifts in items related to the line manager

	Pre-round	Post-round	Post-pre	p-value
	Mean(sd)	Mean(sd)	Mean(se)	Mean(sd)
My line manager is only interested in my performance (i.e. tasks achieved or processes completed).	3.1 (1.7)	3.7 (1.9)	0.6 (0.2)	0.012
My line manager avoids discussing emotional issues with me.	3.1 (1.5)	3.5 (1.6)	0.4 (0.2)	0.055

unhelpful and inaccurate labelling, i.e. 'They have taken a long time to produce those results; it is because they are incompetent/lazy'. Hearing the stories of the panellists appeared to correct these cognitive distortions.

This can be explained by findings from the social psychology literature. Humans are known to project their anxieties onto the 'outgroup' [56], which in the context of this case study, is people within other departments or wards. We also have a tendency to explain the negative behaviour of those within outgroups as reflecting shortcomings in their personality. This is known as the 'ultimate attribution error' [89]. To return to a point discussed at the start of the case study, and as highlighted by the doctor within the Schwartz Round, this may be underpinned by the stress-induced self-directed focus [106]. Another way of viewing this is that stress contributes to decrements in mentalization; 'the

capacity to envision mental states in self and others' ([38], p. 23). This is depicted in Fig. 4.

Interpretation

The fact that the Schwartz Rounds appear to address cognitive distortions that underpin the feelings of disconnection between staff, whilst improving feelings of compassion, is likely to have important implications for patient care. The author anticipates that this would reduce incidences of withdrawal and help to tackle the tendency for silo working in the NHS. This is known to have an indirect impact upon patient care because it poses a barrier to effective team working [116].

Further research is required to determine whether continual attendance at Schwartz Rounds provides a preventative factor against anxiety and withdrawal. Figure 5 details the way in which this might be realized.

Team ORES results

Ten out of the 11 staff who attended the interviews, completed the ORES. The results were compared with the data collected prior to the Schwartz Rounds. Notwithstanding the low sample size, highly statistically significant differences were found between the two groups. The team respondents rated themselves as experiencing considerably higher levels of burnout (<0.001) and emotional labour (<0.001), when compared to the Schwartz Round attendees. They also reported feeling significantly more negative (0.001) about the organization.

Analysis of the component 'support from the line manager' also revealed marked (0.01) differences. The team rated their line manager much more negatively ($M = 46.0$, $SD = 3.2$) than those attending the Schwartz Rounds ($M = 55.4$, $SD = 15.4$). Interestingly, the team data also revealed a relatively strong negative correlation between the line manager component and the beliefs regarding the level of care shown to staff by the organization ($r = 0.65$, $p = 0.06$). This indicates that as the respondents felt more negatively towards the manager, they also felt more negatively towards the organization. Further correlational analysis was conducted to compare the team data with those who had prior experience of the Schwartz Rounds and separately, with those for whom it was their first attendance (Additional file 1: Appendix 14). The differences persisted, suggesting that the differences could not be attributed to a possible prior benefit of attending the Schwartz Rounds.

Item-level analysis revealed further important differences between the two groups. As detailed in Table 4, correlations were found between the item 'I would be receptive and supportive if others within my team talked openly about the emotional impact of their work' and the item, 'I feel safe and supported to discuss the emotional impact of my work on my team'. Analysis of the Schwartz Round groups' responses revealed a statistically significant positive correlation between these items. This suggests that those who were most open to supporting others in their team ($M = 6.3$, $SD = 0.8$) also tended to feel safe and supported to self-disclose ($M = 5.4$, $SD = 1.3$). In contrast, there was a very weak correlation

between these two items for the team respondents. Although they rated themselves slightly higher ($M = 6.5$, $SD:0.5$) than the Schwartz attendees in terms of the level of support shown to colleagues, they rated themselves as feeling less safe to share their feelings ($M = 4.6$, $SD = 1.9$).

A final disparity was in the correlation between the items, 'I would be receptive and supportive if others within my team talked openly about the emotional impact of their work' and 'I avoid discussing the emotional impact of my work with my team, for fear that people will see me as weak or emotionally unstable'. A statistically significant negative correlation was found for these items, but only for those with prior experience of attending the Schwartz Rounds. A similar strength correlation was found for the team data but it failed to reach significance, due to the low sample size. The correlation for those with no prior experience of attending the Schwartz Rounds was, in comparison, much weaker.

The possible link between the team and those with prior experience of attending the Schwartz rounds is that they have been exposed to work-related stress in others which may have helped them to normalise it. The team have observed this in their line manager, whereas the Schwartz Rounds attendees have been party to the self-disclosures of their colleagues within the wider organization.

Discussion

The team results came as a surprise to the author. The nursing and HCA team were ostensibly cohesive. She had assumed that this afforded them some protection against stress. However, their feelings of being unsafe meant that they were not able to trust their colleagues sufficiently to open up to them. An important mediating factor in this was that the ward manager did not have the capacity to be 'psychologically present' [16]. Her inability to provide containment for the team appeared to be an important source of their stress.

Unfortunately, the way that the team coped with their stress may well have served to compound it. Although the expressed intention of the staff members was to help each other, their reticence in self-disclosing effectively

Table 4 correlation between emotional support items

	I would be receptive and supportive if others within my team talked openly about the emotional impact of their work				
TEAM	Pre-Schwartz round	Pre-schwartz - no exp	Pre-schwartz - exp	All	
<i>r</i> (<i>p</i> -value)	<i>r</i> (<i>p</i> -value)	<i>r</i> (<i>p</i> -value)	<i>r</i> (<i>p</i> -value)	<i>r</i> (<i>p</i> -value)	
I feel safe and supported to discuss the emotional impact of my work within my team	-0.11 (0.760)	0.42 (0.001)	0.36 (0.041)	0.34 (0.046)	0.37 (0.003)
I avoid discussing the emotional impact of my work with my team for fear that people will see me as weak or emotionally unstable	-0.42 (0.0226)	-0.33 (0.014)	-0.28 (0.122)	-0.41 (0.013)	-0.34 (0.007)

reinforced the model of coping modelled by the ward manager; that emotions should be repressed and hidden away. This epitomizes the problem with the psychological defence of withdrawal. Although it might be helpful in the short term by reducing feelings of stress, it is damaging in the longer term by virtue of the fact that it reinforces 'large blind spots in awareness' ([21], p.224). The author believes that this problem may be addressed by the Schwartz Rounds. The fact that the sessions start with a panel discussion is likely to be helpful for staff who do not feel safe to self-disclose; it means that they do not have to take this leap themselves.

Conclusions

The findings from the case study suggest that attendance at the Schwartz Rounds was associated with increased feelings of interconnectivity and compassion amongst staff. An important antecedent for this appeared to be the self-disclosures of other staff. Attendees reported that hearing the accounts of their colleagues prompted them to reconsider attribution errors that they had made. It also enabled them to recognise that their feelings were experienced by others; that they are normal. Pilot data from the ORES indicates that the Schwartz Rounds may also give rise to increases in self-reflection and reductions in feelings of emotional labour.

Further research is required to determine whether Schwartz Rounds yield indirect benefits for patient care. Mediating factors are likely to include improvements in team working, an increased sense of community amongst staff and a strengthening of their psychological attachment to the organization. The role of healthcare leaders in providing emotional containment to staff also merits further investigation. Particular attention should be given to the training and support that is needed to equip leaders with skills in this area. Specialist knowledge of psychological processes and group dynamics is likely to be an important prerequisite.

Limitations

The author acknowledges the following limitations to this study:

- The lack of a control group prevents firm conclusions from being drawn. It is not possible to exclude the possibility that other large group interventions might produce similar outcomes. Two features of the Schwartz Rounds distinguish them from more traditional group approaches and would need to be controlled for in future research. Firstly, the sessions commence with emotive stories, told by a panel consisting of staff within the organization. Aside from the apparent role of this

in addressing attribution errors, this may also operate to normalise emotion and encourage self-disclosures. Secondly, reflections by the attendees are prompted and guided by two trained facilitators.

- One limitation of the ORES was that it did not ask attendees whether their line manager was present and moreover whether they contributed (provided a self-disclosure or a reflection) during the Schwartz Round. This may have helped to elucidate the finding that people tended to feel more negatively about their line managers by the end of the sessions. Further research is needed to explore this. One possibility is that it reflects an element of projection. This could arise from a process whereby attendees re-categorize themselves as the 'in-group'. In this scenario, non-attending managers would then come to be seen as the 'outgroup'.
- A more fundamental problem was that the number of people who completed the ORES was small, meaning that the study was insufficiently powered. This increases the likelihood that some of the differences were due to chance. The author plans to use the findings to inform new research hypotheses and the design of a more robust study.
- The sample also lacked diversity. Future studies would need to recruit a more representative sample.
- A test-retest study is required to validate the ORES. This would be necessary to ensure that it is a reliable tool, with limited within-person variation.
- To protect the confidentiality of the interviewees, the author was the only person to code the interviews. However, to reduce the risk of bias, this should have been performed by a second researcher.

Additional file

Additional file 1: Appendix 1. The Organisational Response to Emotions Scale (ORES). Appendix 2: XXXXX GAP Trial Set-up Form. Appendix 3: The trust's proposal form. Appendix 4: The Organisation's approval for the study. Appendix 5: Components of the ORES. Appendix 6: Letter to Schwartz Round attendees. Appendix 7: Staff support form. Appendix 8: Dates and topics discussed at the Schwartz Rounds. Appendix 9: Staff stress results provided by OH for 2014. Appendix 10: Staff stress results provided by OH for 2013. Appendix 11: The National Staff Survey results for the trust. Appendix 12: Results from interviews with nursing and HCA staff. Appendix 13: ORES data. Appendix 14: Team vs Schwartz Round attendee ORES data. (DOCX 176 kb)

Abbreviations

HCAs: Healthcare assistants; ORES: Organizational response to emotions scale

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The dataset supporting the conclusions of this article are included within the article and its additional files.

Competing interests

The author declares that she has no competing interests.

Consent for publication

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Ethics approval and consent to participate

The East Kent Hospitals University Foundation Trust ethics department approved the research on 13.11.2016. The R&D reference was: 2015/Neuro/05.

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References

- Adams S. CQC 'can't guarantee' it would spot another Mid Staffs. 2013. <http://www.telegraph.co.uk/news/health/news/9855047/CQC-cant-guarantee-it-would-spot-another-Mid-Staffs.html>. Accessed 4 June 2015.
- Arbuckle GA. Humanizing Healthcare Reforms. London: Jessica Kingsley Publishers; 2013.
- Arnstein AFT. Stress signalling pathways that impair prefrontal cortex structure and function. *Nat Rev Neurosci*. 2009;10:410–422.
- Balme E, Gerada C, Page L. Doctors need to be supported, not trained in resilience. 2015. Available at: http://careers.bmj.com/careers/advice/Doctors_need_to_be_supported_not_trained_in_resilience. Accessed 2 Jan 2016.
- Bamber MR. CBT for Occupational Stress in Health Professionals. East Sussex: Routledge; 2006.
- Baxter P, Jack S. Qualitative case study methodology: study design and implementation for novice researchers. *The Qualitative Report*. 2008;13:544–59.
- Bentall R. 2016. Available at: <http://health.spectator.co.uk/what-i-wish-stephen-fry-knew-about-mental-health/>. Accessed 2 March 2016.
- Bevan H, Helen Bevan on Change Management. 2014. http://www.institute.nhs.uk/quality_and_value/introduction/article_15.html. Accessed 26 June 2014.
- Bibby J, Tomkins C. Would criminalising healthcare professional for willful neglect improve patient care? *BMJ*. 2014;doi:10.1136/bmj.g133.
- Bell J. Why is it important and can an unhelpful culture be identified? 2015. <http://www.tavistockconsulting.co.uk/organisational-culture-nhs/>. Accessed 13 October 2015.
- Berwick D. A promise to learn- a commitment to act. 2013. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/226703/Berwick_Report.pdf. Accessed 15 December 2014.
- Binney A. Number of NHS staff off for mental health issues doubles. 2015. <http://www.bbc.co.uk/news/health-32029802>. Accessed 12 January 2016.
- Bradshaw A. An analysis of England's nursing policy on compassion and the 6Cs: the hidden presence of M. Simone Roach's model of caring. *Nursing Enquiry*. 2016;23:78–85.
- Campbell D. Mid Staffs Hospital Scandal: the essential guide. 2013. <http://www.theguardian.com/society/2013/feb/06/mid-staffs-hospital-scandal-guide>. Accessed 4 June 2014.
- Campbell D. Final report into Mid Staffs scandal likely to prove devastating for NHS. 2013. <http://www.theguardian.com/society/2013/jan/30/final-report-mid-staffs-scandal-devastating-nhs>. Accessed 4 June 2014.
- Cardona F. The Manager's most precious skill: the capacity to be 'psychologically Present'. *Organisational and Social Dynamics*. 2003;3:226–35.
- Care Quality Commission. East Kent Hospitals University NHS Foundation 2014. Trust Kent and Canterbury Hospital Quality report. http://www.cqc.org.uk/sites/default/files/new_reports/AAAA1946.pdf 9. Accessed 13 August 2014.
- Christoff K. Dehumanization in organizational settings: Reassessing our beliefs in view of the scientific evidence. 2012. <http://www.christofflab.ca/pdfs/Christoff2014-Dehumanization.pdf>. Accessed 4 June 2014.
- Cole N, Bown C. Special Measures Action Plan, East Kent Hospitals University NHS Foundation Trust. 2015. <file:///C:/Users/melanie.george/Downloads/NHS%20Choices%20Action%20Plan%20-%20final%20Nov%202015.pdf>. Accessed 15 November 2015.
- Cooke A, Watts J. We're not surprised that half our psychologist colleagues are depressed. 2016. <http://www.theguardian.com/healthcare-network/2016/feb/17/were-not-surprised-half-our-psychologist-colleagues-are-depressed>. Accessed 1 March 2016.
- Coon D, Mitterer JO. Psychology: A Journey. 5th ed. Belmont, California: Wadsworth Publishing Co Inc; 2014.
- Cornwell J. Schwartz Rounds: spread 'small acts of kindness' among staff. 2014. <http://www.hsj.co.uk/schwartz-rounds-spread-small-acts-of-kindness-among-staff/5076549.fullarticle>. Accessed 2 February 2015.
- Coward R. Why have so many nurses stopped caring? An investigation into the crisis-hit NHS. 2013. <http://www.dailymail.co.uk/health/article-2275943/NHS-Why-nurses-stopped-CARING.html>. Accessed 5 July 2014.
- Creswell JW. Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. London: Sage; 2014.
- Cunnane D, Warwick R. Francis report: what went wrong with NHS Leadership? 2013. <https://www.theguardian.com/healthcare-network/2013/feb/14/francis-report-nhs-leadership>. Accessed 11 December 14.
- Dartington A. Where angels fear to tread. In: Obholzer A, Zagier Roberts V, editors. *The Unconscious at work*. East Sussex: Routledge; 1994. p. 101–9.
- Dawson J, Burke D. Working together on delivering a patient centred focus should be top of the agenda for commissioners and providers across the country. *Health Service Journal*. 2014;124:23.
- Department of Health. The Handbook to the NHS Constitution for England. 2013. <https://www.england.nhs.uk/2013/03/nhs-constitution/>. Accessed 15 July 2015.
- Department of Health. Expansion of groundbreaking scheme to support NHS staff. 2013a. Available at: <https://www.gov.uk/government/news/expansion-of-groundbreaking-scheme-to-support-nhs-staff>. Accessed 12 Dec 2015.
- Dey I. Coding Categories. In: Bryant A, Charmaz K, editors. *The Sage Handbook of Grounded Theory*. London: Sage Publications; 2010. p. 167–91.
- Dickerson SS, Kemeny ME. Acute stressors and cortisol responses: a theoretical integration and synthesis of laboratory research. *Psychological Bulletin*. 2004;130:355–91.
- Dickerson SS, Mycek PJ, Zaldivar F. Negative Social Evaluation, but not mere Social Presence. Elicits Cortical Responses to a Laboratory Stressor Task *Health Psychology*. 2008;27:116–21.
- Dobson PJ. Approaches to theory use in interpretive case studies – a critical realist perspective. 1999. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.10.722&rep=rep1&type=pdf>. Accessed 2 November 2015.
- Donnelly L. New figures show soaring NHS stress leave, and 15 days sickness a year. 2015. <http://www.telegraph.co.uk/news/health/news/11776802/New-figures-show-soaring-NHS-stress-leave-and-15-days-sickness-a-year.html>. Accessed 4 January 2016.
- Feagin J, Orum A, Sjöberg G, editors. *A case for case study*. North Carolina, USA: University of North Carolina Press; 1991.
- Fielding NG. Triangulation and mixed methods designs. *Journal of Mixed Methods Research*. 2012;6:124–36.
- Fonagy P, Bateman A. Introduction to Mentalization. 2013. https://www.ucl.ac.uk/psychoanalysis/people/pages/Anthony/oxford_mbt_training. Accessed 4 January 2016.
- Fonagy P, Gergely G, Jurist EL, Targe M. Affect Regulation, Mentalization and the Development of the Self. New York: Other Press; 2014.
- Francis R. Report of the Mid Staffordshire NHS Foundation Trust Public Inquiry. 2013. <http://webarchive.nationalarchives.gov.uk/20150407084003/http://www.midstaffspublicinquiry.com/sites/default/files/report/Volume%203.pdf>. Accessed 2 July 2014.
- Franczak K. Attachment styles and the ways of coping with stress in polish nurses. *Advances in Palliative Medicine*. 2012;11:62–73.
- Gardner F. Being Critically Reflective. Basingstoke: Palgrave MacMillan; 2014.
- Genelletti S, Richardson S, Best N. Adjusting for selection bias in retrospective case-control studies. *Biostatistics*. 2008;10:17–31.
- Gibbs GR. Grounded Theory-Selective Coding. 2010. <https://www.youtube.com/watch?v=w9BMjO7WzmM>. Accessed 4 January, 2016.
- Glaser BG. The Constant Comparative Method of Qualitative Analysis. 2008. <http://groundedtheoryreview.com/2008/11/29/the-constant-comparative-method-of-qualitative-analysis-1>. Accessed 4 January 2016.
- Goodrich J. Schwartz Center Rounds® Evaluation of the UK pilots. 2011. http://www.kingsfund.org.uk/sites/files/kf/field/publication_file/schwartz-center-rounds-pilot-evaluation-jun11.pdf. Accessed 14 February 2015.
- Goodrich J. Supporting hospital staff to provide compassionate care: do Schwartz Center Rounds work in English hospitals? *Journal of the Royal Society of Medicine*. 2011;105:117–22.

47. Grandy AA. Emotion regulation in the workplace: a New Way to conceptualize emotional labor. *Journal of Occupational Health Psychology*. 2000;5:95–110.
48. Gray DE. *Doing Research in the Real World*. London: Sage Publications; 2009.
49. Green AE, Albanse BJ, Shapior NM, et al. The roles of individual and organizational factors in burnout among community- based mental health service providers. *Psychological Services*. 2014;11:41–9.
50. Gurung AR, Roethel-Wendorf A. Stress and Mental Health. In: Regan AR, Gurung A, Eshun S, Gurung RAR, editors. *Culture and Mental Health: Sociocultural Influences, Theory and Practice*. London: Blackwell Publishing; 2009. p. 35–53.
51. Hinshelwood RD, Skogstad W. "The dynamics of health care institutions". In: Hinshelwood RD, Skogstad W, editors. *Organisations, Anxiety, defence and culture in health care*. East Sussex: Brunner-Routledge; 2000. pp 3–15.
52. Hochschild A. *The Managed Heart*. Berkeley: University of California Press; 1983.
53. Hyett N, Kenny A, Dickson-Swift V. Methodology or method? A critical review of qualitative case study reports. 2014. file:///C:/Users/melanie.george/Downloads/23606-123012-1-PB.pdf. Accessed 4 January 2015.
54. Haslam A, O'Brien A, Jetten J, et al. Taking the strain: Social identity, social support and the experience of stress. *British Journal of Social Psychology*. 2005;44:355–70.
55. Haslam A, Reicher S. Stressing the group: social identity and the unfolding dynamics of responses to stress. *Journal of Applied Psychology*. 2006;91:1037–52.
56. Haslam A, Reicher SD, Platow MJ. *The New Psychology of Leadership, Identity, Influence and Power*. Hove, East Sussex: Psychology Press; 2011.
57. Harry B, Sturges KM, Klingner JK. Mapping the Process: An Exemplar of Process and Challenge in Grounded Theory Analysis Educational Researcher. 2005;34:3–13
58. Health and Safety Executive. Work related stress, Anxiety and Depression Statistics in Great Britain 2015. 2015. <http://www.hse.gov.uk/statistics/causdis/stress/stress.pdf>. Accessed 2 November, 2015.
59. Hoda R, Noble J, Marshall S. Developing a grounded theory to explain the practices of self-organizing Agile teams. *Empirical Software Engineering*. 2012;17:609–39.
60. Hochschild AR. *The Managed Heart*. London: University of California Press; 1983.
61. Johnston DW, Jones MC, Charles K, et al. Stress in nurses: stress-related affect and its determinants examined over the nursing Day. *Annals of Behavioral Medicine*. 2013;45:348–56.
62. Kolb SM. Grounded theory and the constant comparative method: valid research strategies for educators. *Journal of Emerging Trends in Educational Research and Policy Studies*. 2012;3:83–6.
63. Lakhani N. Targets are crowding out compassion in the NHS, claims report. 2008. <http://www.independent.co.uk/life-style/health-and-families/health-news/targets-are-crowding-out-compassion-in-the-nhs-claims-report-837825.html>. Accessed 21.6.2014.
64. Lawlor D. Test of time, a case study in the functioning of social systems as a defence against anxiety: rereading 50 years on. *Clinical Child Psychology and Psychiatry*. 2009;14:523–30.
65. Leiter MP, Day A, Price L. Attachment styles at work: measurement, collegial relationships, and burnout. *Burnout Research*. 2015;2:25–35.
66. Le Blanc PM, Hox JJ, Schaufeli WB, et al. Take care! the evaluation of a team-based burnout intervention program for oncology care providers. *Journal of Applied Psychology*. 2007;91:213–27.
67. Lim D, DeSteno D. Suffering and compassion: the links among adverse life experiences, empathy, compassion, and prosocial behavior. *Emotion*. 2016; 16:175–82.
68. Lloyd J, Bond FW, Flaxman PE. The value of psychological flexibility: examining psychological mechanisms underpinning a cognitive behavioural therapy intervention for burnout. *Work and Stress*. 2013;27:181–99.
69. Lown BA, Manning MA. The Schwartz center rounds: evaluation of an interdisciplinary approach to enhancing patient-centred communication, teamwork and provider support. *Academic Medicine*. 2010;85:1073–81.
70. Maben J, Peccei R, Adams M, et al. Exploring the relationship between patients experiences of care and the influence of staff motivation, affect and wellbeing. 2012. http://www.nets.nihr.ac.uk/_data/assets/pdf_file/0007/85093/ES-08-1819-213.pdf. Accessed 4 June 2014.
71. Maben J, Taylor C, Dawson J, et al. A Longitudinal National Evaluation of Schwartz Centre Rounds®: an intervention to enhance compassion in relationships between staff and patients through providing support for staff and promoting their wellbeing. 2014. http://www.nets.nihr.ac.uk/_data/assets/pdf_file/0004/129631/PRO-13-07-49.pdf. Accessed 4 June 2015.
72. Marin KA, Rotondo EK. Rumination and self-reflection in stress narratives and relations to psychological functioning. 2015; <http://www.tandfonline.com/doi/full/10.1080/09658211.2015.1124122>.
73. Martin LJ, Hathaway G, Isbester K, et al. Reducing social stress elicits emotional contagion of pain in mouse and human strangers. *Current Biology*. 2015;25:326–32.
74. Maslach C, Schaufeli WB, Leiter MP. Job burnout. In: Fiske ST, Schacter DL, Zahn-Waxler C, editors. *Annual Review of Psychology*; 2001. 52, 397–422.
75. Mason MF, Morris MW. Culture, attribution and automaticity: a social cognitive neuroscience view. *Social Cognitive and Affective Neuroscience*. 2010;5:292–306.
76. Mastracci S, Guy ME, Newman MA. Emotional labor and crisis response. *Working on the Razor's Edge*. Armonk New York: M.E. Sharp?; 2011.
77. Menzies Lyth I. Social systems as a defence against anxiety: an empirical study of the nursing service of a general hospital. *Human Relations*. 1960;13:95–121.
78. Morris MW, Peng K. Culture and cause: american and Chinese attributions for social and physical events. *Journal of Personality and Social Psychology*. 1994;67:949–71.
79. Morse J. *Qualitative Health Research*. London: Sage Publications; 1992.
80. Newcomb M, Burton J, Edwards N, Hazelwood Z. How Jung's concept of the wounded healer can guide learning and teaching in social work and human services. *Advances in Social Work and Welfare Education*. 2015;17:55–69.
81. Newell JM, MacNeil GA. Professional burnout, vicarious trauma, secondary traumatic stress, and compassion fatigue: a review of theoretical terms, risk factors, and preventive methods for clinicians and researchers. *Best Practice in Mental Health*. 2010;6:57–68.
82. NHS Employers. How are you feeling NHS? Emotional Wellbeing Toolkit Launched. 2015. <http://www.nhsemployers.org/news/2015/07/emotional-wellbeing-toolkit-launched>. Accessed 1 December 2015.
83. NHS England. Building and Strengthening leadership with Compassion. 2014. <https://www.england.nhs.uk/wp-content/uploads/2014/12/london-nursing-accessible.pdf>. Accessed 2 August 2015.
84. NHS England. Simon Stevens announces major drive to improve health in NHS workplace. 2015. <https://www.england.nhs.uk/2015/09/nhs-workplace/>. Accessed 12 November 2015.
85. NHS England, Care Quality Commission, Health Education England, Monitor, Public Health England and Trust Development Authority. NHS Five Year forward View. 2014. <https://www.england.nhs.uk/ourwork/futurenhs/>. Accessed 25 October 2014.
86. Northouse PG. *Leadership Theory and Practice*. 5th ed. London: Sage Publications; 2010.
87. Paton N. NHS sickness absence rates up due to short-term approach. 2015. <http://www.personneltoday.com/hr/nhs-sickness-absence-rates-due-short-term-approach/>. Accessed 12 January 2016.
88. Pearson A. Nurses shouldn't carry the bedpan for the NHS crisis. 2013. <http://www.telegraph.co.uk/news/health/10015350/Nurses-shouldnt-carry-the-bedpan-for-the-NHS-crisis.html>. Accessed 2 July 2015.
89. Pettigrew TF. The ultimate attribution error: extending Allport's cognitive analysis of prejudice. *Personality and Social Psychology Bulletin*. 1979;5:461–76.
90. Picker Institute Europe. NHS Staff Survey. 2015. <http://www.nhsstaffsurveys.com/Page/1006/Latest-Results/2015-Results/>. Accessed 28 February, 2016.
91. Porta DD, Keating M. How many approaches in the social sciences? An epistemological introduction. In: Porta DD, Keating M, editors. *Approaches and Methodologies in the Social Science*. Cambridge: Cambridge University Press; 2008. p. 19–40.
92. Public Health, England Official Statistics. NHS sickness absence rates, provisional statistics: February 2015. 2015. <https://www.gov.uk/government/statistics/nhs-sickness-absence-rates-provisional-statistics-february-2015>. Accessed 12 December 2015.
93. Rasmussen E, Jørgensen K, Leyshone S, editors. *Person Centred Care*. 2014. http://www.sustainia.me/resources/publications/Person-Centred_Healthcare.pdf. Accessed 5 April 2015.
94. Reeder GD. Attribution as a Gateway to Social Cognition. In: Carlston D, editor. *The Oxford Handbook of Social Cognition*. Oxford: Oxford University Press; 2013. p. 95–117.
95. Ritchie J, Lewis J, Mcnaughton N, et al. *Qualitative Research Practice, A Guide for Social Science Students and Researchers*. London: Sage; 2014.
96. Robinson OJ, Vytal K, Cornwell BR, et al. The impact of anxiety upon cognition: perspectives from human threat of shock studies. *Front Hum Neurosci*. 2013; doi: 10.3389/fnhum.2013.00203.

97. Schwartz B. A Patients Story. 1995. http://www.theschwartzcenter.org/media/patient_story.pdf. Accessed 14 August 2015.
98. Scott BA, Barnes CM. A multilevel field investigation of emotional labor, affect, work withdrawal and gender. *Academy of Management Journal*. 2011;54:116–36.
99. Silverman D. *Doing Qualitative Research: A Practical Handbook*. London: Sage; 2000.
100. Stannard O. Supporting NHS staff at work: could Schwartz Centre Rounds hold the key? 2014. <http://www.kcl.ac.uk/nursing/newsevents/news/2014/Supporting-NHS-staff-at-work-Could-Schwartz-Centre-Rounds-hold-the-hold-the-key.aspx>. Accessed 23 July 2015.
101. Steimer T. The biology of fear and anxiety-related behaviours. 2002. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3181681/>. Accessed 6 December 2015.
102. Stellar JE, Kraus MW, Manzo VM, Keltner D. Class and compassion: socioeconomic factors predict responses to suffering. *Emotion*. 2012;12:449–59.
103. Tang A. Love's labours redressed. Reconstructing emotional labour as an interactive process within service work. 2012. <http://bura.brunel.ac.uk/handle/2438/7038>. Accessed 4 June 2014.
104. Tellis W. Application of a case study methodology. 1997. <http://www.nova.edu/ssss/QR/QR3-3/tellis2.html>. Accessed 2 December 2015.
105. The Point of Care Foundation. Schwartz Rounds. 2015. <https://www.pointofcarefoundation.org.uk/our-work/schwartz-rounds/>. Accessed 12 December 2015.
106. Todd AR, Forstmann M, Burgmer P, Wood Brooks A, Galinsky AD. Anxious and egocentric: How specific emotions influence perspective taking. *Journal of Experimental Psychology: General*. 2015;144:374–91.
107. Traynor M. Caring after Francis: moral failure in nursing reconsidered. *Journal of Research in Nursing*. 2014;19:546–56.
108. Turner J, Oakes P. The significance of the social identity concept for social psychology with reference to individualism, interactionism and social influence'. *British Journal of Social Psychology*. 1986;25:237–52.
109. Valle J. Being a nurse leader is a tough role. *Nursing Management*. 2014;21:9.
110. Watts J, Robertson N, Winter R, et al. Evaluation of organisational culture and nurse burnout. *Nursing Management*. 2013;20:24–9.
111. Weber R. The Rhetoric of Positivism Versus Interpretivism: A Personal View, *MIS Quarterly*. 2004; 28:3–7.
112. Weeks S. Care Quality Commission and staff engagement. 2014. <http://www.nhsemployers.org/your-workforce/retain-and-improve/staff-experience/staff-engagement>. Accessed 4 June 2014.
113. Welikala J. Respect, dignity and compassion to be mandatory for NHS training posts. 2014. <http://www.nursingtimes.net/roles/nurse-educators/respect-dignity-and-compassion-to-be-mandatory-for-nhs-training-posts/5070484.fullarticle>. Accessed 5 July 2015.
114. Williams S. Student carers: learning to manage emotions. *Soundings*. 1999; 11:180–186.
115. Willig C. *Introducing Qualitative Research in Psychology*. Berkshire: Open University Press; 2013.
116. West M. Presentation at the launch event for the Occupational Psychology in Public Policy PIPP Report on Implementing NHS Culture Change. Burrell Street Auditorium, London UK. 2014.
117. Wheeler S. What shall we do with the wounded healer? the supervisor's dilemma. *Psychodynamic Practice*. 2007;13:245–56.
118. Zapf D, Holz M. On the positive and negative effects of emotion work in organizations. *European Journal of Work and Organizational Psychology*. 2006;15:1–28.

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