Title

What Medical Imaging Professionals Talk about When They Talk about Compassion

Keywords

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Abstract

Background

Compassion is a poorly understood concept in Medical Imaging research, but an increase in its focus was recommended in the Francis Report (2013). Little research has been conducted in this area to date.

Methods

The project was conducted from within a constructivist paradigm with appropriate ethical approval. As part of a wider doctoral study, data were harvested from a Twitter journal club discussion between medical imaging professionals of the author's published literature review and one focus group of post-graduate radiographers. Data were transcribed and analysed thematically.

Results

Compassion in DI is conceptualised according to three themes constructed from the data: 1) Perceptible elements of the procedure; 2) Underlying qualities, skills and abilities of radiographers; 3) Moral and ethical foundations. When medical imaging professionals talk about compassion they talk about its importance in professional practice, the challenges faced in giving compassionate care and the strategies they employ to cope with the emotional as well as physical demands they face. Contradictory organisational values and an over-emphasis on individuals' responsibility for providing compassionate care were also highlighted. Ethical professional practice need not necessarily include in every interaction expressions of compassion, or feelings in a medical imaging professional of caring about their patient.

Conclusion

The concept of compassion has depth, with surface appearances underpinned by moral values and behaviour-motivating drivers. These findings offer a clearer understanding of compassion that could inform radiographic practice and education.

Introduction

An increased focus on compassion was one of the recommendations in the Francis Report following an inquiry into failures of care at one UK NHS trust in 2010.[1] However, in the main, responses to the Francis report did not take up the question of what compassion meant and how its recommendations might be meaningfully implemented, in particular with regard to healthcare curricula nationally and internationally.[2] Furthermore, there is a limited understanding of those behaviours and attitudes perceived as compassionate by patients in both in the UK and the wider radiographic and healthcare communities which might inform the teaching or learning of compassion in radiography education.[3] The research presented in this paper came from a doctoral study which explored the experiences and views of patients, student radiographers and medical imaging (MI) professionals in order to identify the principal components in a conceptualisation of compassion in diagnostic imaging (DI). This, and how compassionate care is experienced and practised in DI, are presented from the perspectives of the MI professionals in this study.

Background

Definitions of compassion in the literature coalesce around ideas of an emotional disturbance in one person upon witnessing the suffering of another, promoting a desire to take action,[4,5] although there is a lack of further detail that could inform patient care in radiographic practice. A literature review revealed a plethora of nursing research into compassion, but a paucity in radiography, although exploratory work is being undertaken in radiotherapy[6] and a discussion is also opening up with regard to the pedagogy of compassion in radiography.[7] Diagnostic radiography differs from other allied health professions in terms of its time-brief, highly technical and task-focussed nature,[8–11] suggesting that conceptualisations of compassion in nursing may not be transferrable to radiography.

Compassion is closely associated with care to the extent that at times the two can be difficult to differentiate. Empathy and kindness are close relatives to compassion but the nature of their relationship is unclear. Emotions play a role in compassion and the concepts of emotional intelligence and emotional labour have been explored both in terms

of the radiographer-patient interaction, and of individual practitioners' emotion management.[12–14] Barriers to compassion can be emotional, physical, and administrative[15,16] with distance and distancing serving dual purposes of physical protection from radiation and emotional protection from the sometimes distressing feelings associated with patients' suffering.[17] The idea of resilience, often championed as a solution to stress that must be an individual responsibility is questioned.[18] Other strategies include the use of humour,[19] most commonly used out of the earshot of patients.[8]

Measures and assessments of individual professionals' compassion predominated in responses to the Francis Report[20] and underpinned political ideas around incentivising compassion.[21] However, a systematic review concluded that there was no agreed way of measuring compassion, despite reviewing a wide range of instruments.[22] Smajdor, summarising Bradshaw's argument maintained that *"It is inherently false to measure, systematise and reward compassion ... If we focus on actions or outcomes without the feeling, we are creating what she* [Bradshaw] *regards as a trite McDonalds type of compassion, a travesty of the real thing.*[23,24]

It is clear that the literature lacks the necessary detail to conceptualise compassion in DI. This paper presents the findings from an online discussion between medical imaging professionals about their perceptions, attitudes and opinions around compassion in order to better understand its meaning and application in radiographic practice.

Methods

The research question asked was: "What are the principal components in a conceptualisation of compassion and how is compassionate care experienced and practised in the context of diagnostic imaging?"

This research was conducted from within a constructivist paradigm[25] (see Figure 1). Constructivism is rooted in the philosophy of idealism; the inquirer and the known are in dynamic interaction rather than discrete entities, and knowledge and truth are not discovered but created through mental processes of meaning-making and understanding.

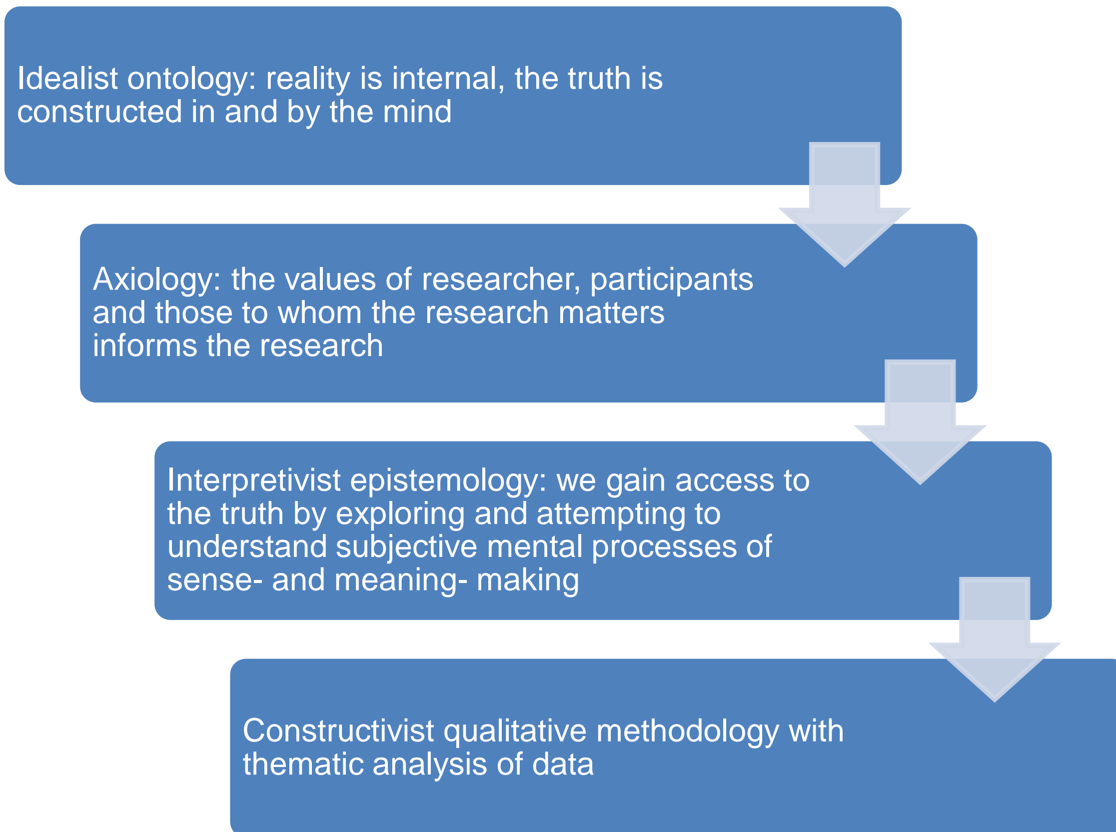

Figure 1: Schematic summary of the constructivist paradigm within which this research was conducted

Methods used in this doctoral research project included individual semi-structured interviews with patients exploring their experiences of undergoing DI; and focus groups with undergraduate student radiographers; the findings from which are not reported in this article. Focus groups with recently qualified radiographers from the principal investigator's local region were conducted between October 2016 and February 2017 to ascertain their experiences during clinical placement, all with regard to their feelings, attitudes and opinions on compassion. Inclusion criteria for the focus groups were:

- Undergraduates who have successfully completed a clinical placement relevant to their year of training
- Graduates from the programme from the last two years.

Exclusion criteria were:

- Students intending to leave the course (in case their responses were shaped by especially negative emotions).

The recently qualified radiographers' focus group took place in October 2016, facilitated by the principal investigator, who was familiar to some of the participants as a previous lecturer. In it radiographers discussed their placement experiences of compassion; what it meant to them, where and how they witnessed it and their views on the importance of compassion personally and professionally. Before a method of exploring more experienced radiographers' views had been decided, an opportunity which had arisen in May 2016 was taken to harvest tweets from an online discussion at MedRadJClub (#MRJC), a Twitter-based international journal club following publication of a scoping review of the literature in *Radiography.*[26] Themes for the MRJC discussion were suggested by the principal investigator who took no further part in the discussion. Themes (T) chosen by the journal club were:

T1 – What does compassion mean to you?

T2 – What facilitators/barriers to compassionate care do you encounter?

T3 – What matters to you personally when you think about your role as a health care professional?

This article reports the findings from all the radiographer data; i.e. the recently qualified radiographers' focus group and the Twitter discussion between MI professionals. The research was approved by the university's Research Ethics Committee; ethical considerations included the use of data already in a public domain as well as confidentiality for participants. Informed consent was obtained from focus group participants and those joining the Twitter discussion were made aware that their tweets were to be harvested for research purposes Data were analysed by the principal investigator both inductively and deductively using Thematic Analysis. Both focus group and Twitter data were coded, then classified and abstracted and themes constructed.[27–29] A combination of NVivo software (v12) and hard copy was used to organise the data. The quality of the research was appraised using Charmaz's four criteria of credibility, originality, resonance and usefulness.[30]

Findings

34 patients who had undergone DI were interviewed, and four focus groups with approximately 6 undergraduate student radiographers were conducted. Tweets from an opportunity sample of approximately 100 medical imaging professionals were harvested and examined to see how they discussed compassion within their professional online community. A total of 1,200 tweets were collected with contributions from the UK, Australia, New Zealand and Canada. Tweets not related to the themes supplied were discounted, as were retweets and those prompting further discussion. This left 142 tweets for coding and analysis. A face-to-face focus group discussion convened by the principal investigator with a purposive sample of six recently qualified radiographers from different year groups and hospitals in the region provided data with which to compare newly qualified with what was assumed to be in the main more experienced practitioners on Twitter. Three main themes were constructed from the data from all the participants in the study (figure 2). The first consists of those components of compassion that are apparent and detectable during the diagnostic imaging procedure; the theme blends the technical and interpersonal features of the imaging encounter. Contained in the second theme are deeper processes which drive and direct the outward expressions and perceptible components of compassion during DI. These may consist of characteristics of an individual, the imaging procedure, the interaction between patient and radiographer, or of the x-ray department environment. The final theme consists of the principles underpinning compassionate care of a patient undergoing DI. The findings section presents the contribution of the radiographers in this study to the thematic construction of the model. Quotes from the Twitter discussion between experienced radiographers are identified using the term RadTweet; those from the recently qualified (post-graduate) radiographers' focus group discussion are labelled P-G FG. Some of the data are presented in such a way as to illustrate how students and radiographers discussed a topic. The symbol // between each contribution distinguishes individual participants' contributions within a discussion.

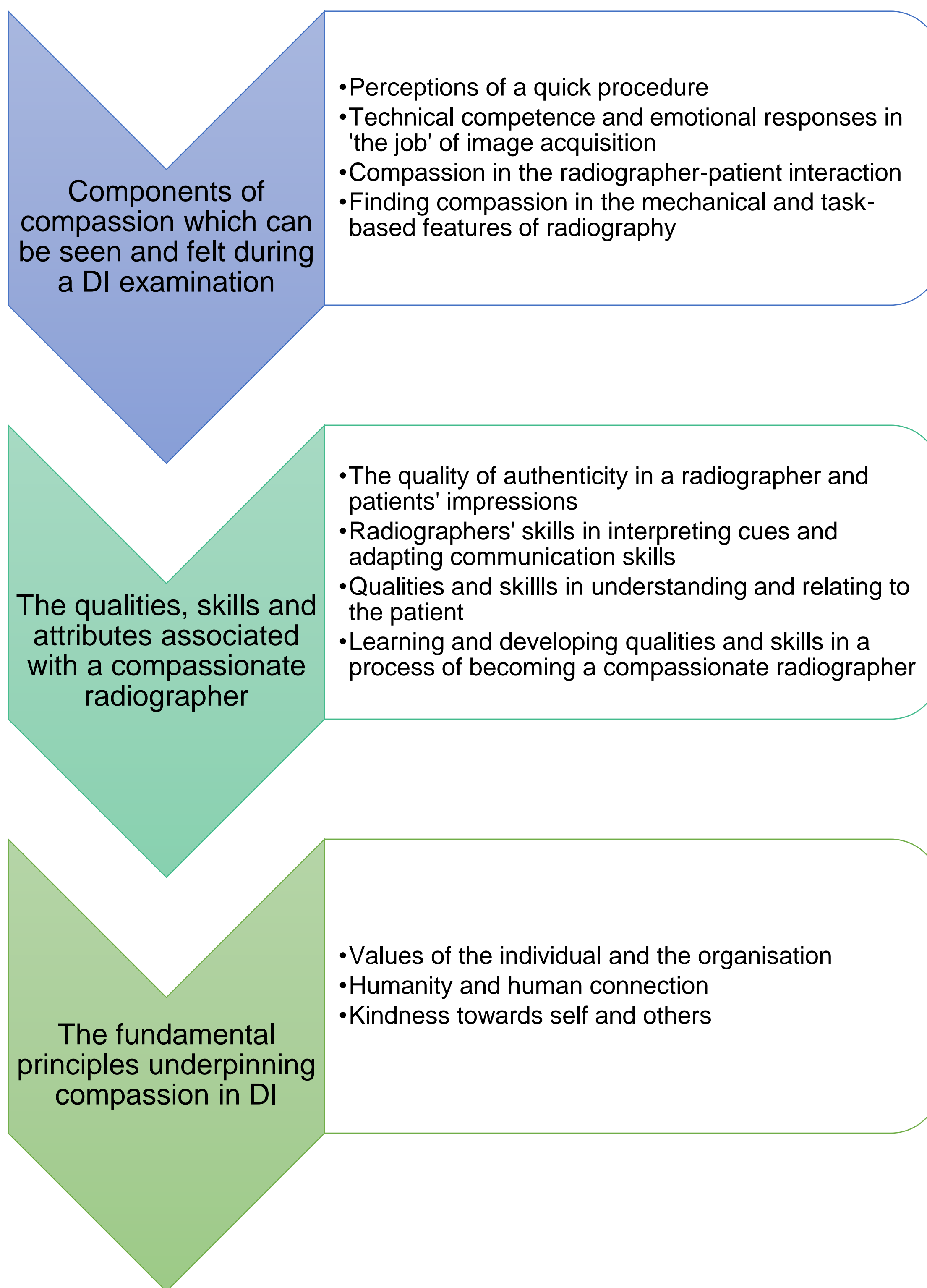

Figure 2: Main themes and subthemes

MI professionals agreed that it was compassionate to do what they could to minimise the time spent in psychological or physical discomfort and that the technical competence required for this was therefore a component of compassion:

"… then the patient is confident in you… because if you get them in and out without being uncomfortable … then that's also compassion for the patient" P-G FG

"Competence a definite part of compassion" // "You are not truly professional if you do not have compassion. You might be good, but not great. A doer of technical tasks" RadTweets

However, a compassionate scenario in which the need for a swift procedure is met conflicted with one in which there is an atmosphere of rush and hurry:

"Increased demand & faster DR [Digital Radiography] units increases department throughput, but reduces rad/patient contact time." RadTweet

"I'm sure we've all been in the situation where you've got a lot of chest x-rays waiting, DR room, you can do that in under a minute, are you giving that patient care? You know to you, it's another chest x-ray, to that patient it's a possible cancer diagnosis, a possible life-changing, thing that they're coming in for. So I think competence can override your ability to remain thinking about your patient" P-G FG

There was a suggestion that pressures of time and workload were barriers to compassion:

"The caring, talking, hand-on-the-shoulder radiographers get told to "hurry up", no time for niceties" RadTweet

However these 'niceties', interpreted as the verbal and non-verbal communication cues which communicate care and compassion to patients were also valued and practised:

"I want to make a difference to each patient's day and be remembered for my smile, generosity etc." // "I x-ray 50 people a day, spend half that time behind a wall. Still find ways to give care." RadTweet

The apparent simplicity of these belies their emotional cost, with emotional fatigue and burnout seen as likely. There was also a belief that their managers and leaders had a part to play in preventing it:

“Burn out very common…” // “Indeed you don't want to run the risk of emotional burnout” // “burn out is a real risk”

“Burnout is a risk but avoidable if supported by management. RadTweets

That this emotional labour was becoming ever more effortful was highlighted in the following impassioned tweet which encapsulated the frustration felt from perceptions of an increase in the demand for them to be caring and compassionate:

“Isn't me being engaged with the patient enough for compassionate care? Is sacrificing family, friends & golf course not enough?” RadTweet

MI professionals discussed how they manage stressors associated with their role. This is seen as both a developmental process which starts whilst still a student as well as a reflective one in post-qualification clinical practice. They noticed how, during training they adapted to the emotional demands of radiography, and developed the ability to detach, without becoming less caring, from some of the more shocking and distressing components of patient suffering:

“I suppose things you hadn’t seen before and just how that would affect you … you know after seeing something like a 20 year old in ITU [Intensive Therapy/Care Unit] after some sort of car crash or something … actually the more you see of that type of thing you become a little bit more used to it, you know, a bit more rational.” // “I don’t think it’s less caring, I think that if you have to be able to… if you found it shocking every time you probably wouldn’t be able to face up to it on a daily basis. You have to be able to deal with it and detach yourself slightly from it but still have empathy for the patients, you know not the other end of the spectrum, not care anymore.” P-G FG

“I think it is important to not get too attached as it can impact your life and professionalism” RadTweet

Some felt that sharing feelings and emotions and self-care techniques such as mindfulness would promote both individual wellbeing, seen in terms of ‘doing better’ in the Twitter discussion, and a radiographer-patient interaction that might be more likely to be perceived by patients as compassionate:

“if we could talk about compassion at work, share stories etc we would probably do better #hippy // ❤ #hippy ❤ #mindfulness ❤// this is going to sound a bit hippy, but mindfulness at work would help to prevent dreaded 'autopilot' mode // supportive colleagues ☺ ” RadTweets

The association with being or sounding ‘hippy’ prompted ideas that challenge cultural norms which have tended towards avoiding expressing and talking about emotions. These and other influences inform ideas around the “*culture of compassion”* promulgated in the Francis Report. Some of the MI professionals in this study saw organisational culture and management as pivotal to compassion:

“Comes down to culture within organisation you can have it all but it requires everyone working together” // “…need compassion at every level :)” RadTweets

Recently qualified radiographers also noticed how they absorbed other strategies which have been proposed as ways of dealing with emotional stressors. The use of dark humour[19] was initially perceived by students as shocking, however over the course of their placements, they gradually incorporated this coping strategy into their own practice:

“Yea, as a student in a lecture you wouldn’t actually hear a radiographer or lecturer make comments of dark humour about a patient but it’s a really good coping mechanism, it definitely… we do a lot of it and it may not be very professional but sometimes you have to make light of the darkness element and as a student I was quite shocked the first time a radiographer did that, I couldn’t believe how inappropriate… it was quite funny and it did make me feel better and now I do it” P-G FG

Another more controversial finding with regard to safeguarding their emotional wellbeing concerns how MI professionals show care towards their patients, sometimes in the absence of sincerity. ‘Faking’ compassion, through use of verbal and non-verbal cues, actions and behaviours designed to comfort and reassure patients in the absence of genuine or heartfelt feelings of caring or compassion was seen as acceptable by some, who saw it as justified in the interests of patients’ wellbeing:

“Saw a great Ted talk recently 'fake it until you become it'. Could work well for those that struggle with compassion” RadTweet

However those who had had experience of being patients themselves, railed against suggestions of inauthenticity as acceptable. Interestingly, fears were also shared that expressing compassion might mask a lack of technical competence:

"Just like a slick used car salesman can pull the wool over a buyers eyes! It's not smoke & mirrors" // "As a cancer patient, I believe I can tell a compassionate practitioner over a used car salesman" // "That wasn't the analogy, can a patient tell incompetence & poorer outcomes when wrapped in great compassion?" RadTweets

The authenticity of feelings of MI professionals towards their patients was something about which some felt very strongly. There was agreement that these feelings should underpin professional values of caring, however in this study these did not in every case coincide with personal ones, suggesting a differentiation between personal and professional values:

"Too many times I hear that if I didn't care I wouldn't work in a hospital, but they don't always go hand in hand" // "Turning up to work is not caring - It's getting paid" RadTweets

Recent graduates remarked on how, whilst students, the attitudes and behaviours of their radiographer clinical educators impacted their feelings and emotions. Negative attitudes in particular came as a shock, followed by feelings of despondency, particularly on first placement, and MI professionals themselves acknowledged a sub-culture of negativity towards patients' perceived lifestyle choices:

"Consider the care to obese pts. New research … indicates diagnostic radiographers blame pts for their own ill-health & poor imaging" // "Not just obese, alcohol liver disease, heart disease, lung cancer in smokers, diabetic ulcers" RadTweets

Recent graduates also remarked on the negativity and judgmentalism of some radiographers towards their patients that they had noticed during placement whilst training and there was dismay at the apparent lack of compassion assumed of members of a caring profession. This included subjective appraisal of the patient's size and the suboptimal practice of selecting exposure factors variously termed 'cranking up, whacking up and bumping up'[31]. These feelings impacted on recently qualified radiographers' intentions for their own future practice:

"You can probably remember ones that have done, like good things, that helped you… similar to them and then you remember bad examples of radiographers that you potentially don't want to be like" P-G FG

MI professionals were aware of their potential to influence students' feelings and emotions and the consequent implications for their future practice, and the conversation on Twitter seemed to prompt a moment of reflection:

"We could inspire one another with good role models/practice" // "Let's not forget that we are role models for our students - they learn how to treat patients from us" // "Great point - 'note to all student mentors' - we have a chance to influence future workforce" RadTweets

These findings illustrate the transience of the radiographer-patient interaction and the ways this impacts on compassion in DI. This and workload pressures contribute to the emotional labour involved in caring with compassion which is, despite appearances, effortful and the resulting stress and burnout are confirmed in this study. Coping strategies include self-care, emotion management including distancing and the 'acting out' or 'faking it' of compassion in the absence of authentic feelings of caring and the use of dark humour. Together these present a more complex picture of compassion, but one which could offer more detail when incorporating compassion into health curricula.

Discussion

These findings confirm research characterising radiography as especially time-brief and task focussed.[9,17,32] The analysis also confirms previous research which characterises diagnostic imaging in terms of the sometimes exceptionally short interaction time that patients spend having their imaging examination[9,10,33,34] which leaves little time for MI professionals to perceive a need for, and if appropriate, express compassion. This, together with lack of time and workload pressures have been clearly identified as inhibitory but not prohibitive to compassion. Ameliorating for this is the technical competence which facilitates a swift procedure minimising discomfort and suffering for patients. Bolderston and colleagues found that therapeutic radiographers were undecided as to whether compassion and technical competence were connected[35]; perhaps the practitioners in

their study were trying to view this issue from the perspective of patients, who in this study saw them as separate and distinct. The suggestion that appearances of compassion may mask a lack of technical competence warrants further research.

Notwithstanding the physical and workload challenges, the demand for enough emotional energy to meet expectations of even a smile for every patient over a prolonged period and in demanding circumstances and further, that this appear effortless, spontaneous and genuine is simply too great.[14,36] Although MI professionals described how they developed the capability to adjust emotionally to their role, over time increasing demand and workload pressures lead to feelings of dissonance, physical and emotional exhaustion. These were attributed to unchecked demands for ever greater and faster throughput and feelings of guilt compounded by frustration at perceptions of a requirement that caring and compassion be more overt and explicit. More recent research has empirically established a link between emotional dissonance and stress and burnout[37] and with compassion fatigue.[38] Coping strategies have been explored in radiography research and in common with other health professions,[39,40] emotional distancing and the use of technical language have been noted as strategies for managing difficult emotions and stress.[17] This deliberate or unconscious placing of an emotional space between patient and practitioner has been shown as a protective function for self-care. Self-care is an aspect of professionalism which is less well supported by the employer; suggestions such as cultivating resilience tend to be added to the pile of responsibilities required of already hard-pressed practitioners. Instead, they could practice critical resilience[41] by gaining an understanding of, and then resisting the political and policy forces shaping their working practice; for example, taking the time to include acts of compassion when needed, disregarding organisational and cultural pressures to speed throughput. MI professionals do try to support themselves although self-help strategies such as mindfulness despite negative stereotypical associations noticed by some as *“hippy”*.

It is not known what motivated comments seen in the findings which suggested a lack of feelings of care; one possibility is that they are a result of stress and overwork leaving those that made them close to emotional burnout, when capacity to care is depleted. However, consideration must also be given to the assumption that choosing to work in a health profession is automatically associated with an inclination or desire to care. Nursing

and medicine are often perceived as vocations and being drawn to these sometimes referred to as ‘a calling’.[42,43] It may be that the tweets reflected a belief that some MI professionals do not feel ‘called to their profession’ in the way commonly perceived of nurses and doctors.

The idea of faking compassion is one of the more controversial findings. Participants in this study were divided, with some believing that inauthenticity was unacceptable, whereas others felt that authenticity is not an absolute prerequisite for compassion. A theoretical explanation can be provided by Dramaturgical theory, in which expressions given (verbally), and given off (non-verbally) by one individual create an impression in another,[44] see also the seminal work of Murphy.[8] Goffman uses the metaphor of theatre in which actors play roles (here, these are radiographer, student and patient). In DI, the ‘stage’ on which the performance of the imaging examination is set is principally the x-ray and waiting rooms, with backstage areas corresponding with viewing and staff rooms. Front-of-house is where roles of radiographer and patient are played out, backstage is where practitioners can allow any mask or pretence that does not accord with the role to slip away, out of patients’ awareness. Regarding individuals as compassionate only in terms of its expression reflects a blurring of the distinction between person and behaviour in which an act, say of kindness leads to perceptions of a compassionate person. Heider explains that humans have a tendency to attribute behaviours to internal causes, such as personality[45], leading to conclusions that compassion is an individual characteristic when it is only the act is compassionate, not the person. Idealised visions of MI professionals and all healthcare workers see their personal qualities matching exactly those advocated and publicised by their professional bodies and the NHS; uncomfortable as it may be to acknowledge, sometimes this is not the case. However, Dramaturgy is helpful in distinguishing the person from the role, and the findings from this study show that the performance of a role perceived as compassionate does not necessarily require heartfelt and authentic feelings of caring towards each and every patient.

Dark humour is used to cope with difficult emotions[19] and may include jokes, derogatory and judgmental comments which appear at odds with compassion. An alternative interpretation of the judgmentalism seen in this study however, is that it reflects not a lack of compassion, but dismay at the unchecked demand for radiographers’ time, physical

and emotional energy, and with no help given to manage their caseload. Non-judgmentalism is not explicit in the SoR's Code of Conduct but was one component in Taylor and colleagues' concept analysis of compassion in therapeutic radiography.[6] More overtly valued in the counselling professions[46,47] these and Taylor *et al*'s findings suggest that non-judgmentalism could be more explicitly valued in compassionate radiographic practice. However, this creates additional expectations that MI professionals be compassionate, ethically virtuous individuals[48] by demanding that they supress negative or judgmental emotions and feelings towards their patient.

Limitations of the study include the cloak of anonymity conferred by use of a Twitter handle which prevents researchers from ascertaining demographic details of their participants. It was assumed that those contributing to a journal club concerned with medical imaging would be qualified medical imaging professionals, but this could not be ascertained with absolute certainty. Participants' tweets appeared well-informed and based on their clinical experiences, but their identities were not known. The constraints with regard to the number of characters permitted per tweet and the speed at which the discussion moved were further limitations. Firstly, there was very little opportunity to explore in depth any aspect of the discussion, other than when participants engaged in debate over a topic, consequently the chance to enrich the data with further detail was missed. Secondly, coding tweets was challenging; discussion tends to soon become fragmented and decontextualised, resulting in the meaning of some tweets being difficult to interpret. These and other issues have been highlighted elsewhere in the radiography literature[49,50] and research also suggests that thread-based discussions risk creating misunderstandings.[51]

The themes constructed from the findings of this research show that compassion is a broader phenomenon than might be assumed from dictionary definitions, which are confined to feelings around suffering coupled with a desire to relieve it. This may explain why, despite assumptions that it is universally understood, it means different things to different people. This is particularly important for MI professionals because it means that their own understanding of compassion may differ from that of their patients, which can lead sometimes to mis-communication and possible consequent perceptions in patients of sub-optimal care. Students observing a radiographer-patient interaction may also

interpret actions and behaviours through the lens of their own perceptions of what constitutes suffering, what steps, if any should be taken, and perhaps most important of all, what patients think and feel in that moment. For example one of the more surprising findings was that for many patients, demonstrations of compassion are neither wanted nor needed during DI due to their understanding of its technical nature and their over-riding need to be imaged and on their way. This also has implications for radiography education in terms of how compassion is incorporated into the curriculum; it could reach into areas not hitherto immediately associated with compassion such as self-care, communication skills and reflective practice.

Conclusion

The components of compassion seen in the themes resulting from this study show that despite the heavy emphasis in the responses to the Francis report on individual responsibility for compassion in patient care, other factors also play a part. When MI professionals talk about compassion they talk about the challenges they face in today's NHS to care for their patients with compassion and some of the ways they meet these challenges, not all of which are uncontroversial. Studies which conclude that practitioners should be more patient-centred are disputed, with these findings indicating that they are unsupported specifically to have enough time to attend to both the patient and the imaging task. MI professionals are signalling their distress and emotional fatigue at the manufacturing-production ideology now driving the NHS which is compromising their capacity to care. They do this by appearances of frustration including impatience and judgmentalism, some of which may be in fact expressions of dark humour in their efforts to rationalise their impossible workloads. Providing this is saved for backstage radiographic practice it is proposed that it does no harm to patient care and is not a barrier to compassion. Policy and protocol discourse is seen in terms of 'delivering' compassionate care and patient care skills as 'hard' or 'soft'. Healthcare professionals undertaking doctoral research into patient care have previously remarked on the 'politicisation' of the NHS (e.g. Dewar, 2011; Harvey-Lloyd, 2018)[52,53] and the findings from this study confirm these.

Recommendations from this research to MI professionals are that they listen with a questioning mind and critical resilience to policy and protocol statements exhorting them

to show compassion to every patient, and to use the time saved by technological improvements such as digitisation to spend with patients rather than to speed throughput. Further that they resist external pressures to speed patients through if more time is needed to give what care the patient needs in that moment, taking the attitude that the time saved thanks to technology can be spent on the patient, rather than increase throughput.

Recommendations for radiography education include teaching of clinical observation and interpretation of behavioural and non-verbal cues so that students might better understand the complexities of communicating with patients; raising awareness of how patients view compassion; incorporation of compassion and its correlates into the formal curriculum in reflective discussion sessions and specialist training in emotion management ideally with integral clinical supervision.

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