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Obesity, heuristic reasoning and the organisation of communicative embarrassment in diagnostic radiography

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Abstract

This paper, the second of three arising from a broader qualitative study, explores difficulties emerging around radiographer-patient communication regarding obesity in hospital-based encounters, and the situated strategies found by experienced radiographers for handling such situations. Semi-structured interviews with eight clinicians working in plain radiography (mean experience = 21.56 years) were analysed using Interpretative Phenomenological Analysis (IPA), so as to highlight the practical, nuanced and real-world experiences of these individuals regarding obesity communication. Participants generally viewed communicating with obese patients as a potential interpersonal 'minefield'. Most reported having had negative experiences in which patients had acted with denial or outright aggression during examinations but, conversely, all reported cases in which patients had been frank and open about their obesity, and even been happy to joke about it. Equally, all participants were able to document a range of communicative strategies for effectively handling potentially difficult situations. Results further indicate that the documented communicative problems and embarrassment for the patient only generally arose within specific material contexts; i.e. when equipment is inadequate or multiple exposures are necessary. It is concluded that, while participants largely expected any interaction about obesity with a patient to be embarrassing for both parties, their actual experience was much more varied. This indicates a more complex communicative environment than may be expected, and also a potential metacognitive availability heuristic in play - something that might be clarified with future quantitative investigation.

Keywords: Communication; Interaction; Obesity; Qualitative Research; Radiography; Stigma

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Highlights

- Radiographers tend to assume obesity is an inherent communicative 'minefield'.
- Patients do sometimes find their obesity a challenging topic, and react aggressively.
- Patients also sometimes accept or joke about their obesity.
- Radiographers have a range of interactional strategies for handling the topic of obesity.
- Embarrassment around obesity in radiography is tied to material *and* communicative concerns.

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Introduction

According to the World Health Organisation (WHO), worldwide obesity rates have more than doubled since 1980, reaching 'epidemic' proportions by 1997, particularly in the Western world.[1] In the United Kingdom (UK), from which the data used in this paper emerge, and as noted in current National Health Service (NHS) guidelines on 'Identification, assessment and management of overweight and obesity in children, young people and adults'[2], over one quarter of all adults were classed as clinically obese by 2013. This upward trend is placing increasing pressures on national healthcare systems[3] in two key ways. Firstly, the corollary increases in rates of associated comorbidities, such as coronary heart disease, osteoarthritis, diabetes mellitus and respiratory problems increase the overall number of individuals requiring care.[4] Secondly, and more pertinent to the primary material addressed here, the everyday management of obese patients in practical healthcare can create further workload-escalating problems for clinicians, not least in medical imaging departments.[5]

Recent research has reported a range of pertinent difficulties for radiographers. The most commonly observed emerge around precise imaging itself, whereby decreased penetration of X-rays through high levels of subcutaneous fat, intra-abdominal fat deposition, and other obesity-related changes in soft tissue structures, can result in the need for repeat projections, the need to image in quadrants, higher recall incidences and increased biopsy rates.[6-8] On a more practical, everyday level, the manual handling of obese patients also has implications for clinical practice in a range of ways. Positioning such an individual so as to

effect diagnostically-satisfactory results can be awkward and time-consuming, sometimes requiring extra staff, multiple image receptors and particular attention to the patient's respiration and general comfort.[5,9-11]

There remains, however, a serious scarcity of research exploring how affected clinicians in-the-field actually communicate with obese patients, and particularly how they handle attendant matters of stigma and embarrassment (both for the patient and themselves). There is an abundance of work in the broader healthcare sciences relating to professional-patient communicative encounters around a variety of nominally difficult topics, such as mental illness,[12,13] HIV,[14] and, indeed, obesity itself.[15-17] Within radiography there has been some valuable investigation of general practitioner-patient communication, typically using transactional analysis[18,19], but little published literature has emerged to date regarding the specific management of difficult communicative matters. Using Interpretative Phenomenological Analysis (IPA)[20], therefore, this paper reports communication-specific findings arising from a broader qualitative study of the impacts of patient obesity upon the working lives of experienced diagnostic radiographers working in the NHS.

Methods

IPA is centrally ordered to qualitatively describe the complex ways in which individuals make sense of their own experience, and in medical fields has thereby encouraged a focus upon the acquired 'soft skills' of practitioners *and* patients as used in specific contexts, and with respect to specific procedures.[20,21] As such, the approach builds an evidence-base from real clinical experiences, rather than legislating from common-sense or idealised deductive assumptions regarding what constitutes best practice.[13,22]

Participants

Established studies in medical IPA typically use small and relatively homogeneous populations to elucidate the relationship between healthcare cultures and the social psychological experiences of individuals involved therein.[21] With full institutional ethical approval, eight experienced diagnostic radiographers were interviewed (mean years in practice = 21.56), recruited from four different NHS hospitals in the North West of England.

Procedure

Consistent with the IPA approach,[20] semi-structured interviews were used and core issues for discussion were posed as simply and openly as possible, to encourage free discourse around the topic at hand. These issues are summarised in Table 1:

Table 1: Core interview schedule

Core Question	Major Prompts
Could you give me an overview of the main problems that patient obesity has caused in your professional role?	• How did it affect the process? • How did it affect you? • How did it affect the patient? • Can you provide examples?
How did you handle these situations?	• What worked and what didn't? • Can you provide examples?

Further minor prompts were used to encourage elaboration where pertinent, as is standard in IPA data collection.[20] Each interview was captured using a digital voice recorder and transcribed verbatim. As required by institutional ethical mandate, all data were rendered anonymous during transcription, and all participants were allotted labels based on the order in which the interviews took place (i.e. 'R1, 'R2' etc.) when connected to any given quotation in the results. The mean interview length was 30 minutes.

Analysis

Analysis was manually conducted in line with the standard methods of IPA. Raw textual codes were collected into linked (subordinate) themes, and then formulated into master (superordinate) themes that maintained form across the full corpus of data.[23] The original study yielded four superordinate themes, of which "Communication and Stigma" was one; in terms of participants' own discursive focus, however, communication was the single matter of greatest concern and is, thus, handled as a singular issue here. A parallel paper, addressing two further superordinate themes (pertaining to the organisational and material/technological aspects of handling obese patients) is available elsewhere.[23] A paper addressing implications around the final theme – everyday diagnostic challenges - is, at time of writing, in preparation. This methodologically-appropriate division of dissemination was explicitly permitted within the conditions of ethical approval.

Trustworthiness

As recommended by Yardley[24], the character of the provisional analysis was determined through consistent discussion and review of data by all four authors[a] until consensus was reached. *Impact and importance* was tested by presenting this provisional work at a major radiological conference; peer feedback arising from this presentation was then utilised to fine-tune the analysis for publication. *Transparency and coherence* are, ideally, evident in the close correspondence between presented data and claims advanced.

Results

The issue of Communication and Stigma is addressed in terms of its two core subordinate aspects.

1. The Radiographer – Anxiety, professionalism and social experience

When discussing patient obesity in general, all participants broadly argued that such interactions had simply been a communicative 'minefield' for them at times, and that this often led them to expect that raising the issue would be embarrassing for both them and their patient. As such, they approached any such situation with trepidation regarding what to say or, more specifically, how to say it. For example, with respect to the contexts of repeat projection and table weight limit.

> **R2:** *"If they are obese and approaching that [table] limit, having to explain to them that you might need to be waiting for the only room that will take the excess weight on*

[a] One junior radiographer, two experienced professional and academic radiographers, and one veteran medical researcher with no core background in professional radiography. This diversity allowed for a range of interpretations of the given data.

the table. [A]nd how to approach that without appearing to discriminate against the patient?"

The anxiety that a radiographer can experience around such scenarios is typified in the following account:

> **R6:** *"[I]t's this thing of social embarrassment… and actually we we're embarrassed to bring the subject up…I suppose of things that didn't work in terms of communication was actually our comfort with it, and if maybe we had a set way of dealing with it, a sort of, almost an algorithm of doing something like that, that [made it] acceptable to discuss issues of weight with patients."*

When prompted to examine specific incidences more closely, however, all participants identified multiple cases in which they had found a way of handling communicative problems that had (a) not caused any (evident) embarrassment to the patient, or (b) minimised troubles in already difficult situations. These strategies were accounted for in three broad ways, as discretely typified in the data presented. Respectively: (a) taking a general 'neutral' and professional stance (i.e. working through the situation in as polite a manner as possible), (b) using general professional experience (i.e. adapting context-by-context), and (c) using general *social* experience that can simply negate obesity as a communicative problem.

> **R8:** *"I think you just have to be very professional about it and not [appear] judgemental or sort of condescending…you have to be diplomatic."*

> **R5:** *"[Y]ou get very practiced at wording it correctly for a patient…so I usually dress it up in something a bit more socially acceptable to them specifically."*

> **R7:** *"I've got large friends; I just don't think twice about it."*

It is important to note that these strategies were not necessarily framed as mutually exclusive by participants. For example, the 'neutral' approach reported by R8 was viewed by R2 and

R4 as just one of the contextually-useful registers reported by R5, which can be developed through professional experience.

2. The Patient – Aggression, humour and transparency

In terms of how the participants viewed the patients' side of the reported communicative exchanges, negative stances taken were framed in terms of simple non-recognition:

> **R4:** *"[S]ome people are really sensitive about [their obesity] and in and a little bit in denial about it."*

In such cases, R1, R5 and R7 contended that person-specific sensitivity (i.e. addressing their specific social circumstances) had been a success in mitigating problems in advance. More aggressive acts from patients during examinations were also reported; in these cases, a more neutral and polite approach was always advocated as the only viable one *in response*:

> **R8:** *"Some obese patients are not quite as understanding, and they can get quite offhand really…which can be more tricky to deal with…you just have to really be…polite, professional and just you know, try not to cause any offence."*

This is particularly evident in a specific reported incidence, in which repeat projections were necessary on account of the patient's size:

> **R1:** *"Normally I would be very…subtle about these things, I would never actually say, no this is direct cause…your body size, but…I had to actually say in this case, 'I'm sorry I have to do another one' and she said 'why are you doing another one?', I said 'I'm sorry it's because you are a larger patient.' Which was quite embarrassing at the time…she was getting quite offended and almost quite aggressive about it."*

Conversely, participants also reported patients making their task much 'easier' by casting potentially awkward moments within a humorous frame, and even making self-deprecatory jokes. These were particularly cited within activities relating to patient positioning:

> **R2:** *"[S]ome people do understand, you know they do make a bit of a joke about it, they do say 'Ooh you, ooh it's alright, you won't see my bones because I'm so large'."*

In such cases, radiographer anxiety about talking to the obese patient is often seen to have been allayed to some extent by the patient's own communicative approach. In these contexts, there remained an issue for some participants around what they could still say *as* a professional. For example:

> **R1:** *"[Y]ou have to be very careful about what you say, because if you go along with them and sort of go… 'Oh I know what you mean'. Clearly then you're just saying to them 'Yes, I think you are large too', so you can't do that."*

Finally, participants also reported patients being simply transparent about, and acceptant of, their own obesity:

> **R3:** *"It's clearly easier to deal with people who know they are big, and know therefore that you are going to struggle a bit, and are quite accepting of that."*

As evidenced, this was taken to facilitate less awkward communication on the part of the radiographer. Unlike humour, however, the acceptant form of interaction from a patient was often taken to be a direct actual product of the radiographer's own approach. For example:

> **R4:** *"Most patients are generally aware of their size aren't they? And as long as you are sympathetic...and are treating them with respect when you're asking them to position slightly differently."*

Crucially, however, a patient's acceptance and transparency were not always reported to be congruous with an unproblematic form of interaction.

> **R6:** *"[The] patient that that we dealt with, it was more…the poor chap was just resigned to it and…I mean we said, 'You know you're you're…' I think [he] was 28 stone, and he wasn't offended by it, but I think, I think it just, he was embarrassed."*

In some cases, then, a patient's acceptance of their obesity when interacting with a radiographer does not necessarily preclude them being embarrassed *about* it.

Discussion

Within a great deal of healthcare science, it is assumed that certain topics are self-evidently embarrassing to talk about. For example, with respect to a mood disorder such as depression, embarrassment arising during diagnostic delivery is taken to be a socio-biological reaction resultant of a global stigma attached to depression itself.[25,26] From this perspective, an individual reacts impulsively and negatively to being 'tagged' with what is widely known to be a socially undesirable label. As Erving Goffman noted well over a half-century ago, however, this rather mechanical explanation does not square well with the observable fact, familiar to all, that it is also possible to be embarrassed *for* someone even, crucially, if they are not apparently embarrassed for themselves.[27] There is evidently a strong social and institutional component to embarrassment. This is implicitly recognised in medical guidelines that stipulate how a patient's embarrassment about a potentially stigmatised diagnosis can be countered by explaining that the condition is a 'common thing' to have;[13] embarrassment itself stems first and foremost from a particular sense of being discrepant within a given social context or group. Hence, the participants in the present study report patient embarrassment, aggression or denial (all reflective of what, in Transactional Analysis, is

termed the 'Adapted Child Ego State')[18,19] as arising only during 'problematic' procedures.[5,6,28] In some ways, this mirrors the classical Social Model of disability.[29] For example, where a hospital has enough high weight-sustaining examination tables such that no obese patient has to wait for a 'specialist' resource, that specific source of interactional embarrassment is potentially negated. The communicative world is seldom isolated from the material world[23] and we cannot consequently consider radiographic communication about obesity as a thing *in itself*. Rather, it is bound-up in the everyday business of actually doing radiographic procedures.

It is also the case that the notion of a governing stigma about obesity that permeates all contexts, directing behaviour, is also very hard to uphold if we take a serious look at the data analysed.[30] When an obesity-related problem emerges in practice, some patients do indeed react with open embarrassment, denial or aggression, but also some with humour and some with simple acceptance; moreover, acceptance and embarrassment are not necessarily mutually exclusive reactions. Simple, rigid directives about communication can only have limited facility when handling these situations. The value of flexibility in contextual approach, essentially the use of tacit social skills,[13] was recognised by the participants throughout.

This matter draws attention to the central, and practical, concern of 'whose embarrassment is it?' It is no small leap to view humorous communication around ones own obesity as a model for handling potential communicative embarrassment.[27] This issue may indicate an orientation on the part of a patient to the implications of having to have a serious discussion about their weight, and a distinct preference to not do so.[15] Indeed, the Transactional Analysis stance on this kind of humour-use by a patient (a 'Free Child Ego State') is that, while generally seen by practitioners as a 'good thing', it is often an adaptation to the contextual stress of feeling outside of a social group.[18,19] It has been well noted in the

medical sciences, however, that delicate matters can be actively rendered as such in the situated activity of talking about them delicately.[22] This is a fairly self-evident matter if we give it due concern. Silverman,[14] for example, plainly demonstrates how a practitioner who begins to deliver the results of an HIV test in an overtly delicate manner virtually always engenders a 'worst case scenario' anticipation in the client, irrespective of the actual outcome. Several participants here stated that even when a patient draws attention to their own obesity, it would be unprofessional to follow that line of conversation, an issue which in itself caused them anxiety. It should be noted, however, that (in the UK, at least) current healthcare guidelines do not actually make any explicit recommendations regarding communication itself.[2]

We might further ask if a radiographer's reluctance to engage with the broader social norm of sharing a joke about obesity with another person - because professionally "you can't do that" (R1) - potentially highlights the situational stigma for the patient, rather than reduces it? This is also pertinent in situations where a patient is simply open about their own obesity. To respond to openness with 'expressive caution'[14] runs the risk of flagging-up a social stigma where the patient was actually working to downgrade it in that context. It is therefore important to reflect (ethically) upon whether a patient's embarrassment might be better managed through a static and assumed professional norm mandating simple avoidance of given topics unless absolutely necessary, or by the radiographer's core social skills[22] that might engage with those topics if they judge the context prospectively appropriate. Indeed, some research has demonstrated how a patient's transparency or humour about a potentially awkward topic can open opportunities to talk candidly about it, with a view to making positive change.[13,14]

Putting together these observations leads us to consider a key point relating to heuristic reasoning in professional practice.[31] Most of the participants interviewed had

experienced difficult situations with obese patients in specific examination contexts. All of the participants, however, when pressed, had been able to more clearly discuss situations in which the patient's obesity had (a) not been a problem, or (b) they had found a relatively uncomplicated way of handling it. Nonetheless, there prevailed an overarching assumption among most that - in principle - obesity was generally difficult to talk about, and/or should be avoided as a topic, even when the patient talks about it openly. This would imply an *availability heuristic*[32] at work for some practitioners, whereby vivid negative personal examples, or received wisdom of a similar order, govern general global attitudes about obesity communication rather more than everyday positive examples. If such a cognitive shortcut is instrumental in promoting a radiographer's own embarrassment about a patient's obesity *a priori* of any formal interaction, then it has a range of potentially negative communicative possibilities. This is one emergent finding of the present study that would lend itself to quantification in future work, formal models for which are well-established.[33] If demonstrated, there are significant implications for contemporary radiography education at the very least. Among these, for example, are lessons pertinent to the NHS expectation that healthcare professionals will engage with the 'Every Contact Counts' mandate, and address holistic public health concerns within individual contexts. A sense that a professional 'cannot', or 'should not', address a patient's obesity when performing any radiographic procedure that is not specifically related to obesity itself (especially when due to an abstract sense of embarrassment) is one that runs absolutely counter to this imperative.

It was further demonstrated that issues of communicative embarrassment (or moments in which a broader social stigma becomes situationally apparent) are not inherently general, but often specific. If the equipment is sufficient, procedures run smoothly and, notably, if the patient is amicable about these things, then their obesity need not be a point of embarrassment for patient or clinician from the outset. Communicative successes were

actually reported far more often than failures. The experienced radiographers in this study found a way to manage apparently difficult interactions most of the time. They oriented to the situation, and utilised one of several communicative registers to negate (or at least attempt to limit) situational embarrassment for one or both parties. However, an assumption made about the professional acceptability of certain forms of discourse can render an acceptant or even joking patient a source of communicative difficulties. In short, radiographers can be embarrassed even when patients do not appear to be embarrassed themselves.[27] Some of this embarrassment appears to stem from prior negative experiences, which are foregrounded over positive ones in a potential availability heuristic.[31,32] What is evident herein is a supposition among some participants that one 'cannot' mention a patient's obesity unless it is absolutely necessary (i.e. if they are actually being hostile). For these, this remains true even if the patient seems to be making a joke at their own expense, or simply talking about obesity without any obvious inhibition.

Given that there is no mandate to actively avoid the topic of obesity within extant NHS guidelines within which the participants were nominally working[2], we might therefore consider that the participants are orienting to wider rules relating to patient dignity as enshrined in the NHS constitution.[34] As previously discussed, however, a patient's dignity might better be preserved through trusting their own instincts, rather than working against them.[13,22] Indeed, NHS guidelines concerning some other nominally tricky communicative subjects, such as depression and even suicidal ideation, recommend that a clinician should talk about them as openly as possible, exactly so as to normalise those issues.[35] The rigidity of *these* guidelines have, meanwhile, also been shown to have serious problems in terms of patient embarrassment.[13] The combination of these points, and those emergent of the data, indicate that any one-size-fits-all approach to obesity communication in radiography can be

no less risky in terms of preserving a patient's dignity than simply allowing the clinician to make their best judgement on how to accommodate the situation as it arises.

At this point it is important to stress the limitations of this study, some of which extend to all qualitative studies of this order. There is no suggestion made that findings implicate any statistical distribution of issues over wider populations, nor that the issues raised are the only matters that occur within communication about obesity in plain radiography. As it has been noted, there is a strong link between material environments and communicative difficulties. Moreover, cultural differences are also likely to arise. Clinicians working with patients in countries with higher obesity rates than the UK, or even parts of the UK with higher obesity rates, are likely to have access to more efficacious equipment (thereby negating some contexts of difficulty); they are also likely to be more practiced at handling interpersonal issues that manifest. The counterpoint is also likely true. Nevertheless, it is reasonable to anticipate that some aspects of the findings will have more widespread relevance in plain radiography and, indeed, other allied areas of healthcare. The communicative issues arising from, for example, obesity-oriented difficulties with patient positioning and equipment infelicity could well be features of many tactile and/or technology-dependent diagnostic and therapeutic fields.[23] Equally, one might reflect on the discrepancies that might emerge between the findings presented here (regarding experienced radiographers) and the prospective experiences of novices. There is a body of work that needs to be conducted on how a freshly qualified professional might adapt to the issues at hand. For them, handling obese patients will be a far more common business than it may have been for their forebears, but they will also (for now) lack the same practical, social and clinical experience.

Conclusions

This study has taken steps towards illustrating a range of issues within an apparently singular one. Foremost among these is that the nominal social stigma of obesity in direct radiographic encounters often becomes apparent only within material circumstances, and as a consequence of it being treated *as* embarrassing/difficult by one party or the other (or both).[14,27,30] While no individual clinician may necessarily have control over the former, with respect to the latter the participating radiographers had indeed found ways of working with patients, to either talk through a comfortable situation, or make the best of a bad one. It need not be assumed, thus, by a radiographer or a researcher, that obesity is *inherently* a 'minefield' for communication in practice. Rather, and much as Goffman argued[30], stigma and embarrassment themselves were seen to arise at the intersection of context, assumptions and (most importantly) interpersonal actions.

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