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A reflexive thematic analysis of existential losses in men with osteoporosis: “I’m not the person I was somehow ... although I am”

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Abstract

Background Osteoporosis is a global health concern that is likely to increase with a rapidly ageing world population. It affects one in three women and one in five men over the age of 50. Although there is a large body of qualitative research exploring the experience of living with osteoporosis, far fewer studies have focused on men. We aimed to explore the experiences of men with osteoporotic vertebral fracture.

Methods We interviewed 13 White British men aged 63 to 94 with an osteoporotic vertebral fracture. We used the six stages of reflexive thematic analysis: familiarisation with the data; coding; generating initial themes; developing and reviewing themes through discussion; refining and naming themes; writing up.

Results We developed six themes giving insight into the existential losses of men with osteoporosis: I have felt a step change coming; I regret that I am no longer the person I once was; it is demeaning (but others are worse off than me); I need to know where I am heading; I need to understand why me; I need to feel like I am in someone’s hands. We describe moral narratives used in defence of self.

Conclusions Our findings highlight the challenge of deciphering the symptoms of osteoporosis and age-related changes. We also see the impact on self and a struggle to repair self. Healthcare providers are in a unique and privileged position to accompany their patients at points of existential crisis. As such, they attend to the repair of both identity and body. This comes with an ethical responsibility and has implications for clinical education. Health professionals should feel equipped to be alongside people facing existential losses. Qualitative research can give valuable insight into the phenomenology of illness and contribute to improvements in care pathways.

Keywords Qualitative research, Osteoporosis, Men, Vertebral fracture

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Background

Osteoporosis is a non-communicable bone disease characterised by loss of bone mass and increased risk of fracture affecting one in three women and one in five men over the age of 50, worldwide [1]. Osteoporosis results in bone fractures at low impact which can cause substantial pain and disability. It is a global health concern that is likely to increase with a rapidly ageing world population [1]. Left untreated, its impact can be greater than many cancers and chronic non-communicable diseases [2]. Often considered a disease of women, osteoporosis is undertreated in men despite substantial morbidity, and even excessive mortality, compared with women [3–5]. Until recently, guidelines for treatment focused on women [6]. However, osteoporosis in men is a substantial health and economic concern. Evidence-based guidelines for osteoporosis advocate an approach for treating men that is aligned with treatment for women [6]. However, osteoporosis in men is an area of relative research neglect with fewer studies devoted to understanding men's experiences [6–12]. In a synthesis of qualitative research [13] only two out of 35 studies (6%) uniquely explored men's experience compared to 20 studies (57%) of women, and 13 mixed sample studies. In a subsequent 2019 review of men's experiences of osteoporosis, Compton and colleagues identified only four qualitative studies [8]. Although there are examples of studies about men published since 2019 [9, 14] this highlights a gap in the qualitative literature. Qualitative research can help us to understand reasons why men may or may not seek help for osteoporosis: this is important as identifying men with osteoporosis could not only decrease disease burden but also have a significant cost saving [15].

This qualitative exploration was embedded in an overarching study that aimed to explore the feasibility of the Vfrac, a clinical screening tool designed to help healthcare professionals decide if an older woman with back pain is at high risk of an osteoporotic vertebral fracture and therefore requires an x-ray [16]. The study team aimed to explore the relevance of this tool for men with osteoporotic vertebral fracture. Qualitative research is unique in providing phenomenological insight into the human process of meaning-making that is not tapped by other research methods. Therefore, qualitative interviews embedded in quantitative research design can uncover truths about people's experiences that go beyond the overarching study aims [17]. Greenhalgh argues that this body of research, although insightful, often remains undervalued and unpublished [18].

The introspective process of looking within ourselves, examining our own thoughts and feelings, searching for meaning, and expressing this meaning, is integral to humans, and plays an important role in healthcare

decisions. This introspection underpins Existentialism, the essence of which is that humans are conscious of their own situation and reflect upon it as they struggle to make sense of change [19]. This is highly relevant to healthcare decisions because facing illness is an existential experience [20].

This report focuses on men's introspection about their losses in an embedded qualitative study. Understanding these existential losses is integral to high quality health care which aims to help patients navigate illness: illness being defined as how we experience and give meaning to disease [21].

Methods

This was a qualitative study using semi-structured interviews. We obtained ethical approval from West London & GTAC Research Ethics Committee (reference: 22/PR/0088).

Recruitment and sampling

Participants were recruited from databases of previous research trials studying osteoporotic vertebral fracture. These participants had agreed to their details being kept on a database for future studies. The research team sent a patient information sheet (PIS) and asked potential participants to contact the research team if they were interested in taking part. Study information on the PIS confirmed that participation was on a voluntary basis. Those who volunteered to take part were given the option to have an interview in person, on the telephone, or on Microsoft Teams. One of the research team contacted potential participants to answer any questions that they had after reading the PIS, and to seek their informed consent to participate in the study. Interviews took place in person between December 2023– February 2024 and lasted between 52 and 110 min.

Sample size: Qualitative sampling aims to generate ideas and insight: it does not aim to be statistically representative. As such, samples are chosen for their "information power" [22]: this means that the more knowledge participants have about the topic, the fewer participants are needed. The use of the term "saturation" to determine sample size for qualitative research is up for debate [23] and Braun and Clarke question whether the concept of data saturation is compatible with Reflexive Thematic Analysis [24]. Rather, qualitative sampling should focus on the informative power of the data. Table 1 provides our reasoning behind sampling in the context of Malterud and colleagues' suggestions for information power: for example, although we were exploring men's life experiences, we focused narrowly on men's experiences of osteoporotic vertebral fracture. Sample sizes range widely in qualitative research. In a review of 35

Table 1 Sample size informed by information power adapted from Malterud and colleagues [16] (adapted from Malterud and colleagues10)

Malterud's Facets of Information Power	Information power in this study
Aim (broad or narrow)?	Broad exploration* of men's experiences but with narrow focus on osteoporosis impact
Sample specificity (dense or sparse)?	Dense: men with diagnosed osteoporotic vertebral fracture
Use of established theory (applied or not)?	No applied theory*
Dialogue quality (weak or strong)?	Strong: no time limitations, open questioning, experienced researcher (25 years)
Analysis strategy (case or across case)?	Analysis planned across cases* to include a range of experiences

* Malterud and colleagues suggest that these require larger samples*

studies on osteoporosis [13], sample sizes ranged from 5 to 127 (median 21). The team agreed that up to 15 interviews would provide the information power for valuable insight.

Data collection

The study team developed an interview topic guide as part of the Vfrac study to inform the overarching study (Table 2). The guide was used flexibly to explore the impact of osteoporosis on men's lives; friends and relationships, emotions and feelings, recreation and fun, work and household roles, and any other areas identified by the men. Interviews were recorded, transcribed verbatim, and checked for accuracy.

We used the six stages of Reflexive Thematic Analysis (RTA): familiarisation with the data; coding (a process that involves distilling meaning into concise phrases); generating initial themes (through constant comparison); developing and reviewing themes through discussion; refining and naming themes; writing up. RTA provides a method for distilling ideas from qualitative data into themes organised around a central idea [24].

Results

We interviewed 13 White British men, aged between 63 to 94 years old (median 82). Twelve interviews were conducted in person at the participant's home, and one

interview was conducted on Microsoft Teams at the participant's request. Most participants (n = 11) lived in the 50% least-deprived areas of England based on the Index of Multiple Deprivation (IMD) score. The IMD score ranks neighbourhoods in England from most deprived area to least deprived area, then divided into equal groups to calculate the IMD decile.

Ten men lived with their wives, two lived with their wife and an adult child; two were widowers living alone in retirement accommodation. Three participants worked part-time, three were semi-retired and seven were retired. They had worked in a wide range of employment: (university academic, schoolteacher, estate agents, police force, military services, service engineer, property sales, civil service, road surfacing, haulage, and a range of other careers described as "portfolio"). Three men had significant mobility issues, needing a walking frame to get around the house. Five men were unable to pinpoint the time of their vertebral fracture ("it just happened"); two described a significant lifting injury; two fractured during an epileptic seizure; two had felt no "snap" but described low impact activities (a stumble or whilst running); two described higher impact (from a tree, and fell from bed).

We developed six reflexive themes giving insight into the existential losses of men with osteoporosis: there has been a step change coming; I regret that I am no longer the person that I once was; the change in me is de-meaning; I want to know where I am heading; I want to know why this happened to me; I want to know what's wrong and how to fix it.

I have felt a step change coming

This theme is underpinned by insidious change over time, and the challenge of deciphering the symptoms of age from the symptoms of osteoporosis.

I don't know where the years have gone, honestly ... I don't feel any different to when I was 70 ... those 20 years, I don't know where they've gone, just disappeared. And now I think to myself, here I am coming up 92, how many people do get to 100? Not that many. (age 92)

Table 2 Interview topic guide

EXAMPLE TOPICS
• Please can you tell me a bit about yourself ... (work, life, family)
• Health, other conditions
• History of fractures
• History of pain
• Social/friends/relationships
• Emotions/feelings/identity
• Appearance/clothing
• Work/DIY/household work
• Self-care/help needed
• Recreation/fun
• Anything else/other impact/thoughts?

There was a sense that the body naturally declines with advancing years (“it’s just one of those things, anno domini”). Some had installed a shower, or cleared the attic, or “downsized” in anticipation of physical decline. Some recognised that their goals had shifted with advancing age (“I thought it’s time I stopped car-avanning”). Some contemplated the tension between “downsizing” and not “giving in”. This tension was exacerbated by cultural and personal expectations to “age well”. Participants were introspective about insidious change.

It’s been clear to me that I’ve got a step change coming up ... for about 30 years I was 40 years old, I felt fine ... And then round about 70, I started noticing that maybe I wasn’t 40 years old... I’d kind of got this vague plan [to undertake a cycling challenge] ... and I suddenly realised, I’m never going to do this ... I’ve only just acknowledged that to myself. (age 76)

This challenge was exacerbated by the accumulation of a “whole tumble of different ailments” with advancing age. For some, osteoporosis was “just another pleasure to have to deal with” or “another spanner thrown in.” Participants joked that “old folk” were prone to “organ recitals!” (where people discuss their bodily ailments with others as they get older).

Everybody’s talking about their ailments these days ... in the first hour of meeting somebody you have the organ recital [laughs] ... As you get older of course you’ve got more ailments, so the complexities get more. (age 76)

I regret that I am no longer the person that I once was

The next theme describes feelings of regret associated with threatened identity.

[I was] somebody who was pretty fit and healthy ... and now I have to be very wary of what I do ... it’s just getting your head around the fact that you can’t do what you used to be able to do ... it can drag you down a bit. (age 63)

Some had been forced to relinquish or adjust roles and/or valued activities that had been forged in their personal history: for example, one participant described how he was brought up to “muck in” and work hard; another had “given in” to a window cleaner to do what he had once done.

My mother was left a widow when I was [young], with a baby, so I was very quickly thrown into the deep end to do all the man things around the house, like mending fuses. I mean, I was eleven and

I built an air raid shelter in the lounge ... [now] anything that involves lifting ... I’m not doing that. (age 94)

We’ve still got a room that needs decorating... I enjoy the painting and the decorating, and I just can’t do it anymore. I would be naturally doing that myself ... I go in there and I think “God I wish I’d have done this” ... I used to clean windows [laugh]: we now have a window cleaner. (age 88)

Although aware that osteoporosis threatened male-gender stereotypes, there was a sense that masculinity and femininity were highly variable: “[there is] almost an infinite variety of ways in which [osteoporosis] could impinge upon men and women”.

There’s the whole kind of thing ... that women are frailer than men, so obviously if you feel frail yourself, you’re not such a man [this was said with irony] ... My wife ... I think she’s more cerebral than me. She’s not the weaker sex, I mean, she’s looking after me these days. (age 76)

Some no longer felt able to tread the same path as their wife, and might feel guilty because they were “curtailing her enjoyment of life by being ill”. Participants described negative impacts on sex and intimacy: “allowing yourself to become an invalid, that does shorten your sex life” (age 88).

My wife is quite able bodied ... sometimes ... I feel a bit guilty that I’m curtailing [my wife’s] enjoyment of life by being ill and that does worry me sometimes; cos when we go out for a walk, she could walk five or ten times as far as I can. (age 88)

My wife and I used to dance, ballroom dancing, sequence dancing, and I ran a club for six years, and of course that came to a stop with this. We really enjoyed that ... we went all over dancing ... so all that has finished. (age 88)

Several had stopped performing self-defining activities that they enjoyed, and that had kept friendships alive (for example, “the [golf] clubs have got put in the corner”). Being unable to walk outside or “get on your bike” could have a profound impact, and for some, cycling, walking, and running were a reminder of the past.

I do miss running. Yes, that’s probably one of the biggest impacts in my life ... Running was a part of my life ... I still see people running now and I look at them and I think, “oh, I wish I could still be doing that”. (age 73)

I did try [to ride a bike] last summer, that was awkward ... can’t do that no more ... As a teenager, I cycled: You didn’t get a car like you do now at sev-

enteen. I used a bike to go everywhere ... I used to go miles on one of them. (age 82)

It is demeaning, but you learn to deal with it

This theme describes feeling de-meant, ashamed, and humiliated because of physical changes. Participants did not want to be seen as “sick” or “old”, like “one of those iconic old people” on the road signs.

[because of] the way I appear, I'm a lesser person ... I'm overtaken by everybody ... you can hear people approaching ... little kiddies come past me, old people on sticks come past me. It's sort of quite demeaning. (age 88)

I sing in a choir ... the chaps around me are much younger than me, and they [stand] up and down without any difficulty. And there's me having to [sit] down terribly slowly, and I feel ashamed. (age 76)

Some used rhetorical narratives to re-affirm threatened self. For example, participants described and valued personal characteristics such as: “not giving into it”; “learning to stand on your own two feet”; “taking the good with the bad”. There was a sense that you should always remember that there are always other people who are “worse off”. Table 3 gives additional examples of narratives used to defend moral stature.

There's not gonna be no magic wand. Just get on with it ... I hear some of them say “Oh, no, I can't do that” I've never been like that. I've always been an “Up-And-Go” and worry about what happens afterwards. (age 82)
Having had the First World War, the Second World War, and these other wars in between ... [there are] more people with broken bones in [current war zone] than what we've got here ... and not getting any treatment. (age 92)

Participants used a surprising level of humour, and laughed a lot, in the face of profound loss.

And by the time I retired, my chums all knew I'd got osteoporosis, so what? Trevor [name changed] is dead, you know, he's got something worse than you! [laughs] (age 76)
I've written my autobiography; I've made copies of it for the family. ... And when I have my funeral ... instead of having the eulogy, they can have a quiz! And the winner (because I'll be cremated) can I have my knee joint [both laugh]. (age 92)

I need to know where I am heading

This theme describes concerns about the future and fears of dependence.

And what is the prognosis ... How will it get worse? Will it stay the same? Will it improve? ... how bad is this gonna get and when's it gonna happen? (age 63)

Height measurement or test results could strike the initial blow. Although some expected a small reduction in height as a normal part of getting older, some were shocked and/or disappointed about loss in stature. For some, this blow was a frightening signal of impending loss.

It was really scary... it was very, very frightening and I remember when I went back to see my GP and he said “right your scan shows that you've got osteoporosis” and I went, “Oh my God”, because I knew a little bit about it, my mother had it and she had it severe ... it was really a real body blow. (age 73)

Some started to feel vulnerable and take precautions that they had not taken until this point (“My mind is on accident prevention”). This vulnerability was reinforced by others (friends, family, colleagues, clinicians). Some felt scrutiny from loved ones, who strongly encouraged a healthy lifestyle, and discouraged risk (for example, “I'm prohibited from going up ladders”). Some were forced to ask for help to do things that they had always done independently.

I will get my son to come over and help me lift something ... I'd have just done it myself before... My wife will ban me from doing silly little things ... I'm more nervous in ice and snow now, I never used to be, it never bothered me, I always used to joke I'm like a mountain goat. (age 63)

At times, contemplating encroaching vulnerability could “seriously get you down”, and some feared the impact of decline into the future (“I don't want to end up in a wheelchair”).

I need to understand why me

This theme describes participants understandings of causality: (a) I have osteoporosis because something physical happened to me, or (b) I am a victim of my genes and circumstance. Some felt that osteoporosis was as result of “hard knocks”, and that you might be “paying now for what you did earlier.”

If you did the things I did, you would have broken bones ... People assume that because I've broken a lot of bones, I must have brittle ones. But if you have a car hit you doing at least 60 or 70 mile an hour ... you're not going to just get a little scrape, are you? (age 92)
Men were a lot tougher you didn't go to the doctor if you just had a cut or anything ... we didn't think

Table 3 Verbatim examples of narrative repair

Moral narrative	Exemplar
You must just put up with it and hope for the best	I let these things go ... It's just all part and parcel ... that's how it's gonna be now. There's not gonna be no magic wand. Just get on with it ... I hear some of them say "Oh, no, I can't do that". I've never been like that. I've always been an "Up-And-Go" and worry about what happens afterwards The doctor said ... that it was something "up with which I had to put" ... [laughs] so, I'm still putting up! ... I would say one has to think of the best way to cope. I've been pursuing the recommended regime and hoping for the best. That's how things are. [Laughs]
You mustn't give into it	I'm a stubborn person in many ways ... I push myself to the limit on it ... I would cycle from Land's End to John O'Groats, I'd start cycling at half-past eight, nine o'clock in the morning, and continue to cycle until six or seven at night, keeping my eyes open for a bed and breakfast as I'm going along. I wouldn't have stopped on the way; I'd just keep going Don't give into it. Like everything, you've got to Stand your ground 'Don't let things get you down ... I can't be one that's saying, "Oh, my back's killing me." I just don't say it ... You don't sit there and say, "Oh, no I can't do that"; you get stuck in and do it ... I won't take no for an answer. If someone says, "You can't do that", I will try and prove that I can!
You must learn to stand on your own two feet	I was brought up in a very isolated place ... [I] was on my own you see... And my life has been one where I'm quite capable of being on my own. I mean Land's End to John O'Groats, I did it on my own, I didn't have somebody as back-up or to carry my gear... A lot of things I've done on my own, and I still do things on my own. 3 I used to travel all over. I could be in Scotland one day, England the next: travelled everywhere. ... I liked you had a certain amount of freedom with your work. I started off from nothing – I wound up with two companies – I was a controller. On average, I had anything between 20 and 50 blokes a day, working ... I've always believed that you help yourself as much as you can – where, a lot of people, just gotta sit there and wait and be looked after, won't they?
You must take the good with the bad	'You've had a good run!' ... you take the good with the bad ... I've seen a lot of things ... When we were kids, we used to go on a Saturday morning and get in a queue for bags of coke for the fire ... where we lived it was slum clearance ... Me mum and dad give us all that they could; and it wasn't a lot, but there was always a good dinner there I was evacuated to a village ... people were invited to come round and to see which [evacuee] they wanted ... "I'll have that one"; "I'll have that one" (disgusting really). And for two days I was trooped around the village to find somebody that would take me in ... He used to spend all evening in the pub, and I used to wait outside the pub until he'd finished having his drink, and then I'd have to run behind his bike back to where I was billeted
You must remember that there are others worse off than you	And by the time I retired, my chums all knew I'd got osteoporosis, so what? Trevor is dead, you know, he's got something worse than you! [laughs] Having had the First World War, the Second World War, and these other wars in between ... you'd think we'd start learning a bit about this ... more people with broken bones in [war zone] than what we've got here, unnecessarily, and not getting any treatment
You have got to see the funny side of it	Everybody's talking about their ailments these days! There's a phrase somebody used, which is in the first hour of meeting somebody; you have the organ recital! [laughs] I've written my autobiography; I've made copies of it for the family. ... And when I have my funeral, I'm hoping they'll have read it by then, and instead of having the eulogy, they can have a quiz! And the winner (because I'll be cremated) can I have my knee joint [both laugh]

anything too much of it... you went to work if you were injured ... I think that [osteoporosis is] a hanger from some of the things that have happened to me. (age 88)

For some, osteoporotic fracture was a direct result of an incident or accident, such as a heavy fall, lifting something too heavy, a seizure, or even strenuous coughing. For these participants, fracture was not seen as indicative of fragile bones.

I had the seizure ... just came straight out of the blue ... I vomited, I wet myself, it was just pretty horrid apparently. And it was only when they started to sort of move me to get me into the chair to go to the ambulance I suddenly was in a huge amount of pain. (age 63)
I helped a woman in the big supermarket ... I went to lift the scooter up to get in the boot and I heard one hell of a "clang" ... it was just like a big 'clunk', like a bell ringing. I knew straightaway what I'd done. (age 82).

Others considered osteoporosis to be “basically, bad luck” or genetic predisposition.

No, I don't think I've caused it. My daughter had cancer; she didn't cause that. What do you say to somebody, basically “it's bad luck”. There may be factors which are undiscovered yet ... but for the average person how do we see it, it's bad luck (age 76).

I need to feel like I am in someone's hands

This theme describes diagnostic ambiguity and fragmented experience of healthcare. There was a sense of being in limbo, or “not being in anyone's hands” (age 76). This lack of clinical ownership or responsibility was exacerbated by fragmentation into clinical specialities that left some feeling “disregarded” or uncared for. In cases where participants had been prescribed medication to improve bone health, some felt abandoned because follow up testing was delayed, sometimes for long periods of time.

How do we know this [treatment] is doing me any good? ... There was no intermediate point to check that my body was responding in the right way. I argued for this to be done, and in the end, it was done ... and lo ... [my bones] hadn't strengthened at all. So that was a bit of a waste of two years ... I haven't been in anybody's hands. (age 76)

Some felt that osteoporosis was more likely to be recognised, or to be taken more seriously in women. Whilst recognising that osteoporosis was more prevalent in women (due to menopause or “lighter bones”) participants emphasised that lots of men could also be profoundly impacted.

I appreciate it's not as common in men as it is in women, it's far more common for a woman to develop osteoporosis than for a man but even so, the impact is still the same. Exactly the same. (age 73)

The protracted nature of diagnosis could be surprising and alarming: “surely this should have been picked up?”. For some, historical fractures were discovered incidentally by an unrelated test. Some described how they had been “fobbed off” as having “just” muscular pain, or had to push to get diagnostic tests. At times, test results could be “vindicating” (although unwelcome). A definitive diagnosis could come as a relief, as it explained and legitimised suffering.

[I was] really quite shocked by the sort of disregard that I felt [the doctors] had about the whole thing ... I thought “well this can't be right” because if this is healing why am I still in so much pain? So,

I asked if I could go and have another x-ray. I went and had another x-ray and they found another fracture. (age 88)

Some felt that it was vital to know what was going on in their body, even when knowing did not affect treatment or outcome.

I suppose the osteoporosis diagnosis ... somehow it put my mind at rest because I'd been wondering where all this pain could come from, all this discomfort, all this inability to move in the way that I was able to before. (age 88).

Storyline

Our findings highlight men's introspection about their current and potential future losses to self, and attempts to create meaning in the face of these losses. These losses are exemplified in one man's thoughts about a time that he could “run and jump”:

How lovely it would be to be pain free and be able to ... walk around in relative comfort and not to have to struggle, that would be a lovely thing to happen and that's what you sort of yearn for. And of course, in your dreams you can run you can jump, and you wake up and you can't jump anymore (age 88).

Our storyline (Fig. 1) is set in the context of an insidious “step change” where the symptoms of osteoporosis and age can be enmeshed and difficult to unpick. The impact on valued and self-defining activities threatens self-identity and are accompanied by profound regret for no longer being what you once were. Feeling demeaned, a person takes steps to repair their moral character with rhetoric and humour. The person asks: “why have I got this, where am I headed, what's wrong with me?” and feel concern that they are “not in in anyone's hands”.

Discussion

We aimed to explore the feasibility of the Vfrac screening tool for men with osteoporotic vertebral fracture. Qualitative research can add value to quantitative research design by providing alternative interpretations and challenging a priori views. In this context, it can generate ideas that go beyond the focused aims of the study [17]. Although our aims were embedded in the Vfrac study, our findings also help us understand personal losses and the ways in which men with osteoporosis deal with these losses. Our finding highlights the challenge of deciphering ageing and osteoporosis (I have felt a step change coming), the losses to self (I

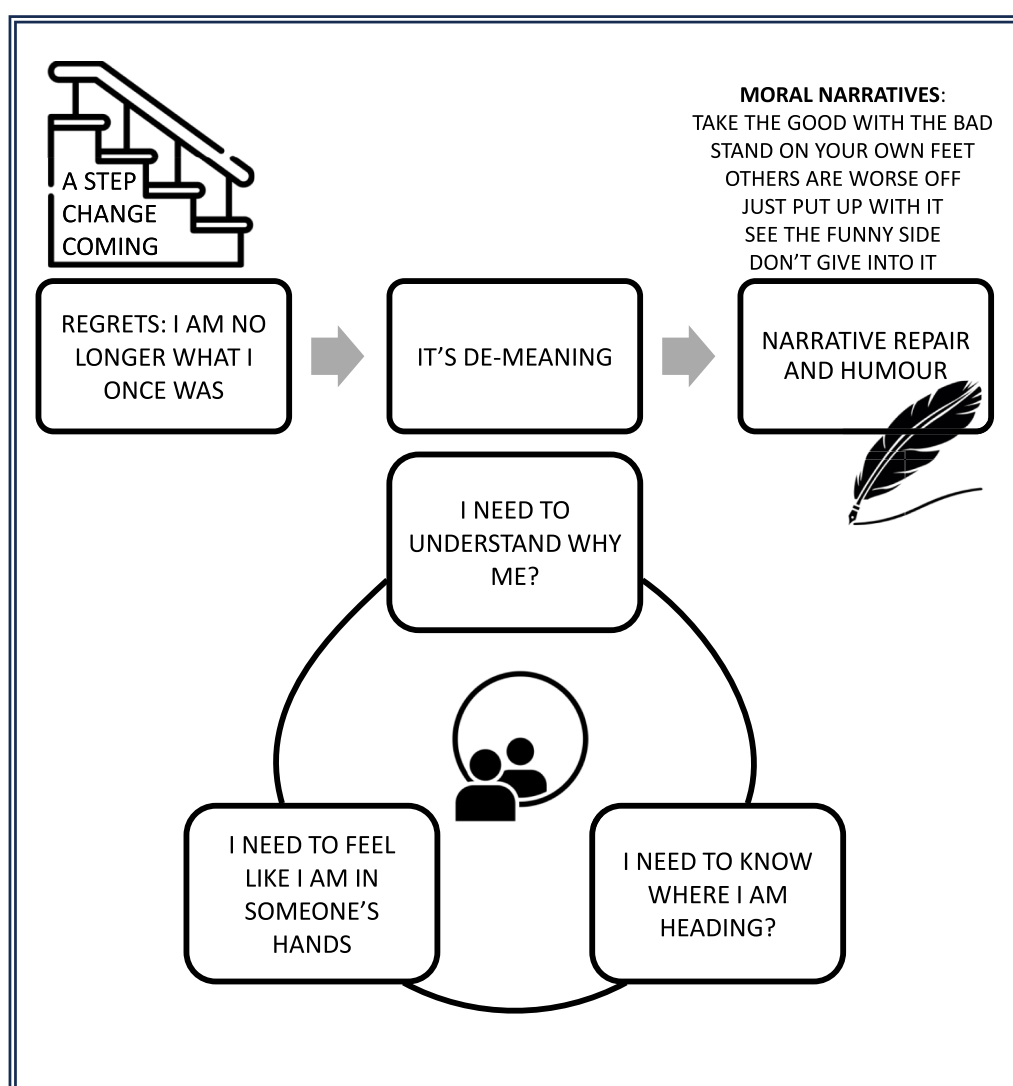


Fig. 1 Conceptual storyline

regret that I am no longer the person that I was), and efforts to deal with losses through rhetoric and humour (it is demeaning, but you deal with it). We also highlight men's concerns in face of their losses (where am I heading, why me, whose hands am I in?).

Why existential losses?

We have framed our findings as Existential losses. Existentialism is underpinned by the idea that being human is a "situated activity"; one where we are "always in the process of making or creating who we are as our life unfolds ... burdened with the task of creating ourselves" [19]. Existentialism is underpinned by an idea that we exist as self-defining beings, always in the process of making or re-making ourselves in the face of "dizzying array of options" [19]. Carel describes this as an Existential

enterprise [21]. In these interviews, we witnessed this "situated activity" as participants realised, and grappled with, threats to self. The need to sustain biographical integrity is a key concept in the sociology of health and illness [25]. Ricoeur proposes that we construct our self narratively and threats to this plot cause "a profound sense of discontinuity and meaninglessness" or *Existential crisis* [19]. This crisis is highly relevant in the context of healthcare as ill health threatens the connection between who we were in the past, who we are now, and who we expect to be in the future. Facing loss, we notice "this isn't who I am" [20]. We ask; why me, why now, what does this mean? [19]. The struggle to maintain sameness in the face of ongoing change was powerfully articulated in the stories that men told us about their lives – "I feel I'm not the person I was somehow ... although I am". As

human beings facing illness, ageing, and death, we introspectively search for meaning [26]. Existentialism incorporates a fundamental paradox that is highly relevant in healthcare: although profound change is inevitable, at the same time a person must sustain their self-plot.

Patients' attempts at narrative repair within health consultations provide important clues to identity loss. For example, humour and laughter do not mean that all is well. We were struck by high level of humour. Minns Lowe and colleagues also found that men used humour to diffuse and deflect the impact of osteoporosis upon changes in self [9]. Use of humour in a consultation potentially contributes to undertreatment if symptoms are not taken seriously as a result. Similarly, Nielson highlight a discrepancy between accounts of living an "unproblematic" life and reports of daily pain [10]. In their qualitative enquiry, men downplayed their symptoms, even when "the pain makes it difficult for me to put my own socks on." Our findings show the value of attending to the repair of both the body and identity in the healthcare. This aligns with a phenomenological lens seeking to explore "the encounter between consciousness and the world" [21] rather than a biomedical lens to diagnose and treat disease.

Although we found that men were aware of gender stereotypes, their stories focused on threats to self, rather than threats to masculinity. This resonates with a review of qualitative research highlighting men's and women's attempts to maintain biographical integrity in response to osteoporotic fracture [13]. Other studies have focused on gender differences in the experience of living with, and being treated for osteoporosis. For example, Compton and colleagues suggest that threats to masculinity underpin underreporting and undertreatment of osteoporosis in men [8]. Nielson and colleagues also explore the feminisation of osteoporosis and the subsequent challenges of not being able to live up to expectations of hegemonic masculinity [10]. For example, one man chose to walk on the opposite footpath to his wife rather than being seen not carrying suitcases. Sale and colleagues highlight the impact of risk taking and non-adaptations that may be explained by attempt to assert masculinities [7]. Solimeo and colleagues further support the emasculating impact of osteoporosis and raise concerns that this may lead to delayed or misdiagnosis [12]. This resonates with Minns Lowe and colleagues who suggest that healthcare professionals might be less likely to attribute back pain to osteoporosis than to other diagnoses, such as cancer [9]. The limited body of work exploring men's experiences of osteoporosis support the need for "educational effort" for men at risk of osteoporosis [11].

Limitations

We interviewed 13 White British men. Most lived in the 50% least deprived areas based on IMD score. It is likely that different combinations of intersecting demographic factors would have an impact on a person's unique experiences. Qualitative research sampling is purposive, rather than representative, and future research to explore the experiences of other men would contribute to understanding. For example, those living in more deprived areas or from marginalised ethnic communities. Our sample was embedded in a wider study which aimed to tap into men's differential experience. The strength of our study lies in men's candour about their existential losses.

Trustworthiness: An independent external qualitative researcher with more than 20 years' experience conducted the interviews and analysed the data. This qualitative researcher was an anthropologist and qualified physiotherapist who was not involved in the design of the Vfrac tool or the Vfrac study. Nvivo software for qualitative analysis was used to facilitate data categorisation and organisation. All members of the team were invited to discuss the themes and comment on the concept-indicator "fit" between theme and exemplar. This is in line with qualitative research methodology.

Conclusions

Our findings are not unique to men, but rather, highlight existential human losses that can accompany disease and to which clinicians should remain vigilant.

How then can we apply these findings to healthcare? First and foremost, the importance of recognising profound loss to self that can accompany illness and ageing; second, recognising that the very human attempt at self-repair, through stories and humour, can mask the need for help; third, recognising that self-searching incorporates the need for answers to: why me, what can I do about it, and what next? Healthcare providers are in a unique and privileged position to accompany their patients at points along this pathway, particularly at points of Existential Crisis. This comes with an ethical responsibility and has implications for clinical education. Health professionals should feel equipped to be alongside people facing existential losses.

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Authors' contributions

FT, KB, SD, TK and EC made substantial contributions to the conception and/or design of the work; FT, KB, SD, TK and EC contributed to the acquisition of data; FT and KB interpreted the data. FT drafted the first manuscript. KB, SD, TK and EC made important intellectual contribution to subsequent versions, approved the submitted version. All agree to be accountable for the accuracy of the work.

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Data availability

This qualitative analysis is based on in-depth interviews with patients that would allow identification. We did not seek permission to archive and/or make this data for secondary analysis.

Declarations

Ethics approval and consent to participate

We obtained ethical approval from West London & GTAC research ethics Committee reference: 22/PR/0088. In accordance with the Declaration of Helsinki all participants gave informed consent.

Competing interests

The authors declare no competing interests.

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