#### RESEARCH ARTICLE

### '...I've Found Once the Weight Had Gone Off, I've Had a Few Twinges, But Nothing Like Before'. Exploring Weight and Self-Management of Knee Pain

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#### Abstract

**Objectives.** Being overweight or obese is a key risk factor for the onset and exacerbation of knee pain. Policy and clinical guidelines encourage lifestyle changes as part of prevention or supported self-management. The present study explores how people who have not consulted for knee pain understand weight in relation to joint pain, if and how they self-manage and potential barriers to doing so.

**Methods.** A qualitative investigation was undertaken using repeat in-depth semi-structured interviews and diary study. Thirteen participants who self-reported moderate to severe pain and had not recently consulted their general practitioner for knee pain were recruited to the study. Thematic analysis of data was conducted.

**Results.** Participants did not recognize the association between being overweight and the onset of joint pain. The findings illuminate understandings of the effect of weight on joint pain, rationales and strategies for losing weight, and how participants' position responsibility for weight gain and loss.

**Discussion.** The present study suggests that clinicians need to account for existing understandings and actions of individuals in relation to weight and joint pain. Supported self-management and public health interventions need to be individually tailored accordingly. © 2013 The Authors, Musculoskeletal Care published by John Wiley & Sons, Ltd.

#### Kevwords

obesity; joint pain; osteoarthritis; qualitative; self-management

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### Introduction

Estimates suggest that 8.5 million people in the UK are affected by joint pain [often attributable to osteoarthritis (OA)] (Arthritis Care, 2004). The condition can have an impact on quality of life and work productivity, and generate inordinate socioeconomic costs (Lubar et al., 2010). Being overweight or obese is one of the strongest risk factors for the onset or exacerbation of joint pain (Hunter and Felson, 2006; Jinks et al., 2006; Blagojevic et al., 2010). Currently, 26.1% of adults (aged 16 years and over) are obese (Health and Social Care Information Centre, 2011) and obesity is predicted to affect 60% of adult men, 50% of adult

women and 25% of children by 2050 (Kopelman et al., 2007); thus, it is likely that the prevalence of joint pain will increase. To address the personal impact and cost to the state, encouraging self-management of joint pain should be central to interventions and best practice in primary care (Department of Health, 2006; National Institute for Health and Clinical Excellence, 2008). One of the core treatments is encouraging weight loss, if overweight or obese (National Institute for Health and Clinical Excellence, 2008).

Previous qualitative research has predominantly examined how lay beliefs and understandings about joint pain and its onset are situated biographically in relation to ageing, 'wear and tear' and occupational history (Busby et al., 1997; Sanders et al., 2002; Gignac et al., 2006; Ballantyne et al., 2007; Turner et al., 2007; Grime et al., 2010; MacKichan et al., 2010). The qualitative studies which offer insight into existing selfmanagement of joint pain have mainly focused on the pathways, facilitators and barriers to exercise or activity (Hendry et al., 2006; Hurley et al., 2010; Morden et al., 2011; Holden et al., 2012). Comparatively less is known about weight and joint pain and only a small corpus of qualitative literature exists. One study reported that people without joint pain do make a connection between excess weight and damaging joints. It also suggests that in some cases people try to lose weight to prevent knee pain onset (Ali et al., 2012). Studies also show that the onset of joint pain negatively influences weight gain and the ability to play sport (Woolhead et al., 2002) and some patients attempt to self-manage their knee pain (weight loss and exercise) either before or during being on the waiting list for a total knee replacement (McHugh et al., 2007). One study reports that some people rationalize that additional weight places pressure on joints, causing pain and damage (Hurley et al., 2010). However, the extant literature does not examine the issue of weight and joint pain in any significant depth.

The lack of qualitative research about weight and selfmanagement is at odds with what is known from epidemiological studies about the role of excess weight on joint pain and physical activity. This is important, given that weight is a key risk marker for joint pain and associated disability. Exploring issues of weight, weight loss and joint pain could help to inform evidence-based guidelines for self-management and aid practitioners in their understanding of how to approach issues of weight within consultations. This paper reports on findings from a study about self-management and chronic joint pain. It explores whether people with joint pain recognize that being overweight/obese is a risk factor for joint pain, individuals' self-management strategies related to joint pain and weight, and the factors that can influence weight management. The study focuses on chronic knee pain because it is the joint most frequently affected and contributes significantly to disability (Jinks et al., 2011).

### Study design and methodology Study sampling and recruitment

The present study was a self-contained project funded by the Research for Patient Benefit Programme (RfPB),

which investigated self-management for knee pain. The sample for the present study was drawn from respondents to a previous (separately funded) population survey of adults in the community over 50 years of age (Thomas et al., 2004). The population survey included an option for responders to indicate if they would be willing to be contacted about future research projects conducted by the host institution. Those who had given consent to be contacted formed the basis of the sampling frame. Potential recruits were purposively identified using selfreported data collected in the survey questionnaire. The study sought to recruit 30 participants. Initial sampling criteria included those who had not consulted for knee pain within the last year and indicated that they experienced moderate to extreme pain, stiffness or problems with activities of daily living. These criteria were selected in order to sample for participants with symptomatic joint pain who had not consulted - arguably, allowing exploration of the 'lay' view of self-management (Morden et al., 2011). None of the participants had received a diagnosis of OA. But because joint pain symptoms in the sampled age group often correspond to radiographic evidence of OA (Duncan et al. 2007), the participants were classified as having OA-related joint pain. The intention, if possible (given that the sample was self-selecting to an extent), was to further split the sample by gender and across age groups (50-74, 74-75 and 75+).

An invitation letter (and information sheet) was sent to potential participants that offered the opportunity to contact researchers to ask further questions and/or to indicate willingness to take part in the study. Twentytwo people agreed to participate at the outset of the study. A sub-sample of 13 participants who considered themselves to be, or said that they had been, overweight (which had affected joint pain or was thought to have affected joint pain) voluntarily discussed issues around body size and weight management (discussed further below). Table 1 details these participants and this paper reports on their accounts. Details of recruitment and retention are included in Table 2. Prior to data collection, written informed consent to participate was obtained from participants. Ethical approval was gained from the local branch of the UK research ethics committee.

#### Methodology

In order to explore patient experiences, beliefs and attitudes, a qualitative design was employed (Bowling,

**Table 1.** Sample demographics

Participant	Age group	Gender	Occupation	Marital status/living arrangement		
376	65–74	Male	Retired	Married, lives with spouse		
755	65–75	Female	Retired	Married, lives with spouse		
805	50-64	Male	Unskilled manual	Married, lives with spouse		
1387	65–74	Female	Retired	Married, lives with spouse		
4365	65–74	Female	Retired	Married, lives with spouse		
4580	65–74	Male	Retired	Married, lives with spouse		
5888	65–74	Male	Retired	Marries, lives with spouse		
6192	50-64	Female	Unskilled manual	Widowed, lives alone		
8245	65–74	Male	Retired	Married, lives with spouse		
8243	65–74	Female	Retired	Married, lives with spouse		
8628	65–74	Female	Retired	Married, lives with spouse		
8987	65–74	Female	Retired	Married, lives with spouse		
9147	50-64	Female	Semi-retired/carer for spouse	Married, lives with spouse		

Table 2. Study uptake and withdrawal

Participant	1st Interview	Diary 1	Diary 2	Diary 3	Diary 4	Diary 5	Diary 6	2nd interview
376	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
755	Yes	Yes	No	No	No	No	No	No
805	Yes	Yes	No	No	No	No	No	Yes
1387	Yes	No	No	No	No	No	No	Yes
4365	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
4580	Yes	yes	No	Yes	No	Yes	No	Yes
5888	Yes	No						
6192	Yes	Yes	No	Yes	No	No	No	Yes
8245	Yes	No						
8243	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
8628	Yes	Yes	Yes	Yes	Yes	No	No	Yes
8987	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
9147	Yes	Yes	No	No	No	No	No	Yes

2001). A critical realist perspective was adopted as it recognizes that there is a reality that can influence people's lives (such as illness, biology or socio-economic position) but that people's understanding and presentation of reality is subject to meaning making and socio-cultural influences (Williams, 1999; Flynn, 2006). Participants were offered the opportunity to take part in three stages of data collection at the point of recruitment (when the invitation letter was sent): an initial interview; taking part in a diary study for six months (for one week per month of their choosing); and participation in a follow-up interview at six months. Undertaking serial interviews offered the opportunity to gain a greater depth of understanding and insights into the

changing circumstances of participants (Murray et al., 2009) and complemented the use of a diary study (Milligan et al., 2005). Diaries allowed access to real-time accounts of daily life and managing illness rather than retrospective accounts provided by interviews. Further, they provided insights into the ebbs and flows of illness experience and strategies used by participants. Diaries helped the interviewer to anchor discussions in the follow-up interviews (Milligan et al., 2005). The information sheet provided at the point of recruitment explained the purpose of the interviews and diaries: to explore what people thought of knee pain, how it affected their lives, and what they did to help when they experienced pain.

#### **Baseline interviews**

An interview guide was devised, based on existing literature. The interview guide was piloted with volunteers from a research user group attached to the host institution (n4). Interviewee reflections on the interview as well as the researcher's perspective of the suitability of the guide were fed back to the whole research user group. The guide was then refined after discussion. During interviews, the interviewer asked questions like, 'Could you tell me about your knee pain and how it started?' or 'What do you think is helpful for your knee pain?' Conversations about 'exercise', 'weight loss' or 'self-management' were purposefully not raised in order to surface participants' rationales and concerns rather than leading them to a particular topic. Consequently, the participants who feature in this paper self-disclosed their concerns or actions with regard to weight.

#### **Diaries**

Appropriate prompts and directions were devised from the literature (Corti, 1993) and in tandem with the afore-mentioned researcher user group. Prompts included, 'Think about problems that your knee pain and other conditions cause in your daily life' and 'Think about the things that you do and why you have done them for your knee pain'. At the end of each baseline interview, participants were asked if they still wished to take part in the diary study. If agreeable, the researchers provided a diary booklet and a pre-paid self-addressed envelope. Diaries were posted back to the researchers each month.

#### Follow up interviews

An interview schedule for follow-up interviews was designed following analysis (discussed further below) of the baseline interviews and completed diaries. This facilitated further exploration of emerging themes or topics. All interviews were undertaken by the lead author between December 2008 and August 2009 and lasted between 20 minutes and one hour and 15 minutes. All interviews took place in participants' homes.

#### **Analysis**

Interviews were professionally transcribed verbatim and checked for accuracy. Thematic analysis was carried out using the constant comparative method, drawing from the principles of grounded theory (Charmaz, 2006). The method involved repeated comparisons of transcripts by inductively coding the data closely, recoding in a more focused way and developing conceptual coding to make associations between focused codes. Memo writing helped to make connections between themes and concepts. Analysis was aided by separate coding by all team members, followed by team discussions to arrive at an agreed coding framework. Thus, coding and interpretations were critically assessed and ultimately strengthened, leading to integration of the datasets (Green and Thorogood, 2004). The QSR Nvivo 8 data management software facilitated analysis. We report here on two broad thematic concepts (and related sub-themes) that emerged from the data. These are: temporally different understandings of the relationship between weight and joint pain and the positioning of responsibility and blame for weight gain/loss in relation to participants' actions.

#### Results

# Temporally different understandings of weight and joint pain

The first broad thematic concept relates to how participants positioned the relationship between joint pain and weight at different time points. Weight was not considered a factor for the onset of pain (retrospective understanding) but was considered salient once participants had lived with pain (contemporary understanding).

#### Explaining the onset of joint pain

Participants retrospectively observed events and made biographical associations within their social context which explained the start of their joint pain. Many of these explanations overlapped and were presented as complementary. For example, this participant outlined the influence of an accident and the effect of his occupation:

'Erm, when I was 40, I had an accident at work and I broke my back and this led to arthritis of the spine, which I presume led to pains in other parts of my body, because I've got pains in most of my joints. But, having said that, I did have knee pain before I finished work because I was a pipe-welder and I used to do a lot of kneeling, and that might have been the reason for the start of it'. (376, 1st interview)

Another participant outlined the confluence of an accident and 'wear and tear' relating to 'natural' ageing as the reason for her pain:

'So I'm thinking it's because of that accident. You don't know really, and there, it's, er, wear and tear isn't it? When you get older'. (8987, 1st interview)

Thus, participants often talked about a combination of antecedents that caused their joint pain; however, being overweight or obese was not given in any of the accounts as a factor relating to the *onset* of joint pain.

# Living with joint pain: Sense making about weight and joint pain

Despite weight not being associated with joint pain *onset*, analysis unveiled that participants made connections between weight and joint pain *once they had lived with* the condition. Two participants discussed how they had been advised to lose weight for their general health, but not in relation to joint pain. Participants lost weight for a variety of crosscutting reasons, including improving their self-image or to feel better generally. Alongside these reasons, they rationalized that being overweight may not help their existing knee pain:

'Cos I've never been heavy at all and I'm thinking, "well, if I'm carrying all that extra weight round and its getting more", you know, I could only see, with my inactivity, it getting bigger and bigger and bigger. I'm thinking, "that certainly isn't going to help your knees". (805, 1st interview)

Relating to this, participants suggested that their joints had been subjected to 'wear and tear' and therefore were weakened. In particular, the idea of placing 'pressure' of extra weight on a damaged joint may incur pain or cause further damage:

'That puts more pressure on your knees and your legs because, you know, it's extra weight you've got to carry about. So, I thought, "well, I've got to get some of this weight off". (376, 2nd interview)

Similarly, this participant suggested that losing weight was important to her in order to prevent damage to her knees: 'I've gone down two dress sizes and lost 21 pounds. I need to. I mean, I was too fat. I'm not silly and obviously, the more you carry, the more weight you're putting on your joints aren't you, you know?' (9147, 2nd interview)

Thus, after living with joint pain, participants rationalized that losing weight would be beneficial and remove unwanted pressure on the joint.

## Living with joint pain: Felt benefits of weight loss

Overlapping with how people made sense about the relationship between weight and joint pain, participants who had lost weight observed that they encountered less pain and discomfort from their knee problems:

'Yeah, well, anyway the thing is, I've found once the weight had gone off, I've had a few twinges, but nothing like before. Whether it's stopped it... but I'm certainly having a lot of pain, you know, and that... that fear of, "oh no, not my knees going again". (4580, 1st interview)

This participant discussed how her weight had fluctuated historically and that she had noted patterns of pain increasing when she carried more weight, leading her to conclude:

'But if I get a bit of weight off, it will definitely go again. I do know that from experience'. (6192, 2nd interview)

Another example is this man, who suggested that a combination of changing his footwear and losing weight made a positive difference to his pain levels and subsequent use of painkillers:

'But I find since last year, since I've lost a little bit of weight, found a pair of shoes that are very, very comfortable that I don't need the medication I'm on... I'm still on them but I only take one every two days now'. (8245, 1st interview)

Thus, participants observed changes in their body mass and lifestyle and associated it with their relative pain levels. As such, losing weight was seen as a positive thing for helping their knee pain and became an ongoing strategy. This further highlights the different time points that influence how participants relate weight to joint pain. In other words, weight is not seen as a factor before joint pain, but is salient once joint pain becomes a part of life.

# Presentations of responsibility and managing weight

The second broad theme concerned how participants presented the responsibility for weight management. This relates to sub-themes regarding weight gain/loss and the strategies used.

### Reasons for gaining weight

Participants offered explanations for initial weight gain that emphasized external uncontrollable reasons. For example, biographical knowledge of physiological constitution was highlighted:

'But that's just me; I've always been, I've always been, I'm big boned, you see, so. That's what, that's what I've been told. I've got a big frame'. (5888, 1st interview)

Others cited predisposing genetic factors, invoking scientific knowledge placed in the public sphere:

'I read a report in the Telegraph a few years ago. It was very interesting. It was an American story on obese people in the States which I think there's a lot of. Apparently, they reckon that it's in us to put weight on'. (4580, 2nd interview)

In some cases, participants cited that physical incapacity, injury or lifestyle changes restricted activity. For example, this woman suggests that her children growing up and leaving home meant that she had not been 'running around' as much, leading to a lack of 'exercise' which caused her to gain pounds:

But you see, when I was younger, you see, you were using more calories when you're younger because you're more active; I mean, having five children, you don't have a lot of sit-downs, you see. Then, when you go to work, you're dashing off at lunchtime to do shopping and you're always busy with the housework'. (755, 1st interview)

In summary, participants detailed reasons that demonstrated that they could not personally control their initial weight gain, distancing personal blame.

#### Weight loss activities

Despite participants depicting the reasons for their weight gain as something outside of their control, they discussed strategies that they used to try to control weight, therefore positioning it as their responsibility and demonstrating a proactive attitude. A common (arguably, unsurprising) tactic was to try to control dietary intake:

'All this chocolate and crisps and fatty stuff isn't any good for you. You know, I'd have a bacon sandwich and I'd have all the puddings and everything and I thought, "no". I've got to cut it down'. (805, 1st interview)

This participant outlined in some detail the strategies used to manage weight, invoking the support of her husband in her account of sensible and responsible dietary management:

'I don't over-eat. My husband will tell you. I have a cup of tea, no sugar; no milk. I have cereals. I don't have nothing fattening for breakfast. If I have a change from cereals, it's either tomatoes or mushroom on toast. If I have a sandwich, no butter and things like that'. (9147, 1st interview)

Another strategy favoured by participants was to engage in more exercise, often going to local gyms:

'And I used to go on the walk-in thing, and the bike, bike and rowing thing; yeah, loved it. Lifting the weights because I used to be a weight lifter, years ago. And, er, I used to enjoy that'. (5888, 1<sup>st</sup> interview)

Going to the gym was described as hard work which required commitment and individual fortitude:

'I go to the fitness centre three times a week, and two years ago I used to go six times. I mean I had to organize my life with military precision. No, seriously. And I did it because I wanted to lose some weight'. (755, 1st interview)

Participants also used resources such as slimming groups like *Weight Watchers* or a personal training programme from a fitness instructor at a gym. Such strategies were framed to suggest that participants proactively took responsibility for losing weight.

# Ongoing challenges of weight management

In spite of participants' desire to lose or maintain weight (and associated recognition of the benefits for joint pain), this was not always straightforward or necessarily maintained in the long term. They initially presented failing efforts as the result of factors beyond their control but later in the interview acknowledged individual factors.

This participant suggested that her body had a natural inclination to 'resist' her attempts to lose weight:

'Yeah, for a few weeks you'll lose the weight, then, but the body stabilizes itself again and this is how I "end up". (9147, 1st interview)

Other participants cited that physical limitations impeded their ability to exercise and had an impact on their ability to lose weight. For example, this gentleman had problems with a hip replacement he said was poorly executed, leaving his hips with the tendency to dislocate:

'Cycling – it's out altogether now and that's one thing I miss, is my bike. The trouble is, if you do that – I won't do it – if you do that, then it tends to pull my hip out'. (4580, 1st interview)

Another problem discussed was the difficulty in balancing competing demands upon their time and fitting in exercise:

'I was busy. I mean, your life's not your life when you're on, you know, a seven days a week job. And, er, anybody who's been the mayor, they'll tell you, it's hard work'. (5888, 1st interview)

Later, in interviews, participants discussed issues of motivation and control – thus, internalizing the responsibility for weight management, contrasting with their rationales for why they gained weight and difficulties with managing weight. Participants highlighted that their lack of resistance to 'bad' food related to life-long and context-specific habits:

'For six months, the weight stayed fairly good. The trouble is, I'm a chocoholic, you see. I was born during the war; you couldn't get chocolate, you couldn't get sweets. So that might be why'. (4365, 1st interview)

Similarly, this participant discussed how he knew that sugar did not help his weight management, but admitted that he had difficulty in resisting temptation:

'But anything with sugar, you know, you shouldn't have anything. But I still have it. I mean, I'll have a cup of tea, and ooh a couple of spoonfuls. That's me, that's up to me – you know what I mean?'. (5888, 1st interview)

People were at pains to point out that they knew what was 'bad' for them and were therefore not stupid, but that they were prone to particular predilections or a lack of will power, as exemplified by this participant:

'I know what I should do but I can't do it. It's, I think it's like a drug addict, really, when you like food. I mean, I like good food, you know. But people misinterpret, you see, if you're overweight because they think that you're either partially brain dead or you don't know the calorific content of food or you're eating all the wrong things'. (755, 1st interview)

Responsibility for managing weight was initially positioned outside of individual control. Later in the same or follow-up interviews, it was depicted as something that participants had to take responsibility for, with the need to show sufficient will power or self-control, thus highlighting tensions in people's accounts.

#### **Discussion**

The present study contributes to our understanding of how people make sense of and discuss the management of weight in relation to joint pain. Findings demonstrate a difference between when and how participants made a connection between weight and joint pain. Participants did not associate being overweight or obese with the onset of their joint pain, which differed from the findings of Ali et al. (Ali et al. 2012). Rather, they noted 'trigger points' such as accidents or sports injuries, offered hereditary explanations, associated the condition with older age because of the tendency for it to be manifest among their peers, or offered a 'wear and tear explanation' associated with working life - findings broadly consistent with previous research in joint pain (Busby et al., 1997; Sanders et al., 2002; Turner et al., 2007; Grime et al., 2010; MacKichan et al., 2010). In other words, people used 'lay knowledge' and made associations and patterns within their life course to explain the onset of their condition (Donovan, 1991; Williams and Popay, 1994).

Although participants did not recognize that weight was a casual factor in joint pain onset, they were aware that being overweight could have an impact on their current pain levels. People either rationalized the effect of weight placing pressure on the joint or made observations about the benefits of weight loss through lived experience. They attempted to lose weight (partly) because of a perception that losing weight would benefit their knee pain and reduce 'pressure' on their joint, similar to previous findings (Ali et al., 2012; Hurley et al., 2010; McHugh et al., 2007). Losing weight was considered to be beneficial for joint pain, with participants noting fluctuating pain levels corresponding with their weight going up or down; this finding further suggested that the embodied experience and assessment symptoms were a central part of the learning and monitoring process that constitutes self-management (Thorne et al., 2003; Morden et al., 2011; Pickard and Rogers, 2012). Thus, the temporal dimensions and different processes involved with lay sense-making were central to how participants related weight to joint pain. Because being overweight or obese is a key risk marker for osteoarthritic joint pain (Hunter and Felson, 2006; Jinks et al., 2006; Blagojevic et al., 2010), it is important to engage patients in undertaking preventive activities for this condition. Discussing health risks is a difficult task which requires the recognition of patients' existing sense-making and knowledge base because people contextualize risk messages against them (Alaszewski and Horlick-Jones, 2003). Such lay understanding and experiences should arguably be explored and built upon as a part of supported selfmanagement by healthcare practitioners when patients with joint pain consult.

This may not be a straightforward endeavour. The study findings suggest that discussing weight and weight loss with a researcher is complex and features competing depictions of the level of personal responsibility for managing weight. Gaining weight was positioned by participants as something that happened because of a natural biological disposition or because of a change in their lifestyle (such as retirement), leading to reduced activity. Thus, initial weight gain was identified as something that was not wholly under their individual control. Participants did, however, suggest

that losing weight was their individual responsibility, and utilized dietary management and tried to do more exercise in order to lose weight. However, when discussing problems with attempts at weight loss, participants described factors out of their control in the first instance. Later in the same or follow-up interviews, they discussed individualized accounts of responsibility for weight loss. In some instances, physical limitations, such as a perceived natural inability to lose weight, or everyday working pressures, were cited as obstacles. More commonly, participants suggested that they were ultimately responsible because of their predilection for particular foodstuffs or a lack of 'will power'. Simultaneously, participants wished to avoid being seen as 'stupid' or incompetent people who did not know how to live properly, exemplified by statements demonstrating their knowledge about health maintenance. Being overweight is a moral issue, fraught with the possibility of being judged for being irresponsible (Monaghan, 2005; Webb, 2009). Sociologists contend that paying attention to how people merge 'public' and 'private' accounts of illness and illness onset so as to avoid judgement as abnormal or being blamed is important (Radley and Billig, 1996). It may be that participants were worried about being judged by the researcher and consequently offer accounts which positioned them as blameless for the initial weight gain. Concurrently, they arguably put forward accounts of being knowledgeable, responsible people in order to manage moral standing in relation to reward or blame for weight loss and gain (Webb, 2009). This is not to say that people were not telling the truth and had not tried to lose weight; rather, the issue is about how discussions are framed and for what purpose. This is important because the feeling of being judged for being overweight is something especially evident in the context of consultations (Malterud and Ulriksen, 2011) and thus promotes 'morality' work and repositioning of blame and responsibility to ensure that 'face' is saved (Webb, 2009). Clinicians therefore face a challenge in unpicking the complexities of how and why people discuss the onset or management of weight gain, something that healthcare practitioners find 'hard' or 'tricky' to do with joint pain patients (Jinks and Ong, 2010). Being aware of the subtle nuances that influence a patient's presentation of weight-related issues is important if proposed patient-centred models of selfmanagement support for joint pain (Porcheret et al., 2011) are to be successful.

#### Limitations, strengths and future research

The present study featured limitations which should be acknowledged. First, the study drew on a small sample of white British participants from a similar geographic location and cultural background. Second, the study focused on a small sub-sample of 13 participants who discussed weight loss. This sub-sample was restricted to those people who volunteered discussions about weight during interviews. Thus, we cannot make universal claims that another sample of participants from another culture or geographic area would offer the same findings. However, the study had strengths, in that the methodology used offered rich insights into joint pain-specific issues relating to weight and some of the broader issues which may crop up when discussing weight in consultations. Although the study may not be generalizable, it offers 'sensitizing concepts' or 'insights into beliefs, understandings and actions that some people may have (Green and Thorogood, 2004) when living with chronic joint pain. Additional research, featuring larger and more diverse samples, is needed to embellish the findings from the present study further.

#### Conclusion

The present study was one of few to explore the issue of weight management in relation to chronic joint pain. As being overweight and obese is a key risk factor to be managed in relation to joint pain onset and progression, it is necessary to gain knowledge of how patients understand weight and joint pain. This is important as it can help to facilitate supported self-management in primary care settings. The present study offers insights into patients' existing reasoning and actions which can be incorporated into consultations for supported self-management. In addition, it also highlights some of the complexities and challenges of understanding how patients discuss weight management. There remains a need for more qualitative research to be conducted in order to develop further knowledge of patient management and knowledge of weight in relation to joint pain.

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