Qualitative studies of obesity: A review of methodology

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ABSTRACT

BACKGROUND: There is a developing interest in qualitative research to understand the perspectives and experiences of people living with obesity. However, obesity is a stigmatised condition associated with negative stereotypes. Social contexts emphasizing large body size as a problem, including research interviews, may amplify obesity stigma. This study reviews the methodology employed by qualitative studies in which study participants were obese and data collection involved face-to-face interviews. METHODS: Database searches identified qualitative studies meeting inclusion criteria from 1995 to 2012. Following screening and appraisal data were systematically extracted and analyzed from 31 studies. RESULTS: The studies included 1206 participants with a mean age of 44 years and mean BMI of 37 kg/m². Women (78.8%) outnumbered men (21.2%) by four to one. Socio-economic background was not consistently reported. The studies employed similar, typically pragmatic, qualitative methodologies, providing rich textual data on the experience of obesity derived from face-to-face interviews. The majority considered quality issues in data collection, analyses and generalizability of findings. However, the studies were weak as regards researcher reflexivity in relation to interviewer characteristics and obesity stigma. CONCLUSIONS: The impact of obesity stigma has not been attended to in the qualitative research. Clear information about study participants is essential, but studies involving face-to-face interviews should also report on interviewer characteristics including body size.

Keywords: Obesity; Stigma; Qualitative Methods; Researcher Reflexivity

1. INTRODUCTION

Qualitative studies have become an accepted methodology within health research [1-2]. Advocates note the strength of qualitative methods in delivering a greater depth of understanding of, for example, the complex phenomena faced by patients living with long term conditions [3-4]. Appreciation of the methods, quality criteria and reporting standards needed for rigorous qualitative research has also become established; and a number of excellent checklists and guides are available [5-7]. Systematic reviews and syntheses of qualitative studies are recognized as a useful contribution to evidence and policy development [8-9].

Core definitions of qualitative research point up the value of flexibility within an emergent design in which textual data are acquired to explore social phenomena in context [10]. In practice, in health and medical research, the data are typically gathered from individual or group interviews or, less frequently, from observation of interactions such as between patient and clinician within a consultation. Analyses typically proceed through iterative stages of coding data to inductively develop, for example, themes, frameworks and theories [11].

Building on previous guidelines and an extensive literature review, the COREQ checklist is useful for studies employing interviews and focus groups [7]. Criteria are grouped within three domains. In the first, labeled “research team and reflexivity”, attention is drawn to how characteristics of the research team and relationships with participants affect responses, interpretation of data and hence credibility of findings. The second domain highlights how the study’s theoretical framework (methodology), sampling, setting, data collection methods affect study quality and findings. The third domain focuses...
on data analysis, interpretation and reporting.

Obesity is viewed as a long term medical condition and is currently one of great concern for public health because of obesity’s increasing prevalence and the associated risks for diabetes and other chronic diseases [12-14]. There has been growing interest in the perspectives and experiences of patients living with obesity and a developing appreciation of the degree to which obesity is a stigmatized condition, associated with negative attitudes and discrimination in many countries [15,16]. People who are obese face difficulties in various spheres of life, such as in education and employment. Derogatory portrayals of obesity are common within the culture and media of these societies.

Stigma is the phenomenon in which societal evaluations negatively impact on individuals’ sense of identity and self-presentation [15]. In some societies, obesity brings a strongly devalued physical and moral identity, creating challenges for those affected by obesity in managing their identity and in presenting themselves in social interaction. Obesity stigma has general consequences in many spheres of life for affected individuals. However, interactions oriented to obesity and therefore emphasizing large body size as a problem, are a context in which stigma will be amplified [16]. This has important, but uncharted, consequences for research about obesity, particularly, research involving face-to-face interaction in data collection.

In this paper, we report on a literature review of qualitative studies in which the study participants were adults categorized as obese and the data collection involved face-to-face methods.

2. METHODS

2.1. Design and Searches

We employed established methods in searches, appraisal, data extraction and analysis of relevant literature [17-19]. We eventually included 31 qualitative studies of obesity in which all, or the great majority, of participants were obese and data collection employed face-to-face methods. The studies were drawn from a range of disciplines after electronic, lateral and key journal searches covering the period January 1995 to July 2012. The databases included: AMED (Ovid); CENTRAL (Cochrane Library); CINAHL (Ebsco); Medline (Ebsco); PsychINFO (CSA); SCOPUS; Web of Science (ISI Web of Knowledge).

Search terms were employed to identify all studies reporting findings on experiences of obesity derived from inductive analysis of qualitative data. An illustrative search in CINAHL with search terms is shown in Table 1. We used search and screening tools within each database to include synonyms, word variants, database labels and to remove duplicates and exclude studies not meeting our criteria. Only English language studies were included.

2.2. Exclusions and Analyses

After independently screening of 417 study abstracts, we were able to exclude the majority (356) because they were not a qualitative study involving adult participants. We appraised the full report of 61 studies and excluded 30 studies for the following main reasons: nine did not provide sufficient information about how data were collected and analyzed or about participant characteristics to be sure participants were mainly obese; seven the sample majority were normal weight or underweight; five the focus was not obesity with inductive analysis of qualitative data; five did not use face-to-face data collection methods; three the sample were not adults; and in one duplicate findings were reported in more detail in an included study.

Methodology information was systematically extracted from the 31 included study reports and summarized in matrices for analysis. Both authors checked extracted data against the original study report. Both authors worked initially independently to identify and then agree on key themes and issues from the extracted data.

3. RESULTS

Included studies are summarized within Table 2 [20-52]. Typically these studies aimed to explore and describe adults’ perceptions and experiences of obesity and of weight management interventions. Our present focus is on the methodology of the reviewed studies not their

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Table 1. Illustrative search (CINAHL).

<table>
<thead>
<tr>
<th>#</th>
<th>Query</th>
<th>Results</th>
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<tbody>
<tr>
<td>S4</td>
<td>S1 and S2 and S3</td>
<td>381</td>
</tr>
<tr>
<td>S3</td>
<td>MW qualitative studies or AB qualitative</td>
<td>46615</td>
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<tr>
<td></td>
<td>MW ( weight loss OR weight control OR obesity OR overweight OR BMI OR body mass index ) or AB (obes’ OR overweight OR body mass index” OR weight N3 los” OR weight N3 control”)</td>
<td>63045</td>
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<tr>
<td>S2</td>
<td>MW ( health status OR quality of life OR attitude to health OR body image OR self concept OR perception OR health knowledge OR health beliefs OR attitudes to obesity OR health behavior OR health education OR health literacy OR health promotion OR life experiences ) or AB (health’ N3 status’ OR qualit’ N5 liv’ OR qualit’ N3 life OR attitude’ N3 health’ OR bod’ N3 image’ OR health’ N3 educat’ OR self N3 concept’ OR percept’ OR health’ N3 litera’ OR health’ N3 knowledge’ OR health N3 belie’ OR health” N3 promot’ OR obes’ N3 psycholog’ OR health’ N3 behav’ OR attitude’ N3 obes’ OR life N3 experienc’e OR liv’ N3 experienc’e)</td>
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<td></td>
<td>S1 qualit’ N5 liv’ OR qualit’ N3 life OR attitude’ N3 health’ OR bod’ N3 image’ OR health’ N3 educat’ OR self N3 concept’ OR percept’ OR health’ N3 litera’ OR health’ N3 knowledge’ OR health N3 belie’ OR health” N3 promot’ OR obes’ N3 psycholog’ OR health’ N3 behav’ OR attitude’ N3 obes’ OR life N3 experienc’e OR liv’ N3 experienc’e)</td>
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</tbody>
</table>
### Table 2. Summary of reviewed studies.

<table>
<thead>
<tr>
<th>Authors (Country) Study aims</th>
<th>Context and recruitment</th>
<th>Participants</th>
<th>Methodology</th>
<th>Interviewer Characteristics</th>
<th>Limitations discussed by authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ali, et al. 2010 (UAE) To explore barriers and enablers to weight management of women at high risk of Type 2 diabetes</td>
<td>Mix urban, suburban and semi-rural; Primary care centres in one region of UAE. Doctors in the selected health centres invited participants</td>
<td>75 participants Mean age 39.1 years 30.7% overweight 44.0% obese Women 100%</td>
<td>Eight focus groups. Audio and video recording. Height, weight and waist circumference measured prior to focus group</td>
<td>Influence of grounded theory approach and constant comparative methods</td>
<td>Two female Emirati nurses trained in focus group facilitation. No mention of age or body size. Sampling and generalisability</td>
</tr>
<tr>
<td>Befort, et al. 2008 (USA) To explore perceptions and beliefs related to body size, weight, and weight loss</td>
<td>Predominantly low income, urban; USA mid-west state various community settings. Recruited with flyers posted throughout the community</td>
<td>62 African-American women Mean age 46.6 Mean BMI 40.3 75.8% co-morbidity Women 100%</td>
<td>Six focus groups Audio and video recording. Height and weight measured after the focus group</td>
<td>A grounded theory approach. Cross checking of analysis and team discussion to arrive at themes</td>
<td>Focus groups moderated by two clinical psychologists with training in group facilitation. Two research assistants. No mention of gender, age, ethnicity or body size. Research assistant identified as female African American. Sampling and generalisability</td>
</tr>
<tr>
<td>Blixen, et al. 2006 (USA) To identify differences in values and beliefs about obesity and weight reduction, knowledge of obesity related medical conditions, and self-perceived barriers to weight loss between African American (AA) and Caucasian (C) women</td>
<td>No indication of socio-economic status; Recruitment of African American and Caucasian women from hospital medical outpatients in Midwest US</td>
<td>20 participants BMI &gt; 30. Mean age— AA group 39.3; C group 46.2 Women 100%</td>
<td>Four focus groups audio recording. Groups stratified to AA and C women. States all participants were clinically obese.</td>
<td>Grounded theory—constant comparative method of analysis used to generate constructs based on coded themes.</td>
<td>“Discussion was conducted by a moderator…”. No mention of gender; age, ethnicity or body size of moderator. Potential biases arising from the influence of group dynamics.</td>
</tr>
<tr>
<td>Brown, Jones, et al. 2006a (UK) To develop a theoretical model of the links between obesity and quality of life</td>
<td>Predominantly urban, (industrial city, north of England) Recruited from general practice Diverse/contrasting socio-economic population</td>
<td>28 participants Mean age 56 years; Mean BMI 35.6 86% at least one co-morbidity Women 64% (n = 18) Men 36% (n = 10)</td>
<td>28 individual interviews (face to face in the patient’s home) Recruited patients with a recorded diagnosis of obesity from GP surgeries</td>
<td>Grounded theory approach</td>
<td>No mention of gender; age, ethnicity or body size of interviewers. NOTE: Research team included patient representatives with personal experience of obesity. Generalisability but argues purpose was to generate theory.</td>
</tr>
<tr>
<td>Brown, et al. 2006a (UK) To explore perceptions and experiences of patients diagnosed as obese</td>
<td>Predominantly urban, (industrial city, north of England); Recruited from general practice Diverse/contrasting socio-economic population</td>
<td>28 participants Mean age 56 years; Mean BMI 35.6 86% at least one co-morbidity Women 64% (n = 18) Men 36% (n = 10)</td>
<td>28 individual interviews (Recruitment/sample as above)</td>
<td>Grounded theory approach</td>
<td>No mention of gender; age, ethnicity or body size of interviewers. NOTE: Research team included patient representatives with personal experience of obesity. Recruitment bias—difficult to assess. Sample did not include Black and Asian ethnic minority groups although present in the population.</td>
</tr>
<tr>
<td>Study</td>
<td>Region</td>
<td>Recruitment Method</td>
<td>Sample Characteristics</td>
<td>Data Collection Method</td>
<td>Analysis</td>
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<tr>
<td>Byrne <em>et al.</em> 2003 (UK)</td>
<td>Oxford UK-mixed socio-economic centres</td>
<td>Participants: 76 Mean age 41 years, 56 with history or current obesity: 28 “Maintainers”, 28 “Regainers”, 20 healthy weight for comparison. Women 100% (n = 76)</td>
<td>60 individual interviews Two group interviews. No mention of measurement</td>
<td>No broad approach specified Transcript data coded into grouped themes or topics</td>
<td>No mention of gender; age, ethnicity or body size of interviewers or group facilitators.</td>
</tr>
<tr>
<td>Chan and Gillick 2009 (USA)</td>
<td>Chicago USA. Participants recruited from community and medical centres in urban Chicago</td>
<td>7 participants mean age 47.6 years mean BMI 43.3 Women 43% (n = 3) Men 57% (n = 4)</td>
<td>7 individual interviews. BMI as a selection parameter for recruitment</td>
<td>No broad approach specified. Transcript data coded into concepts and themes</td>
<td>“Researchers identify with both the fat and disability communities; particularly sensitive to the issues facing marginalized groups. The commonalities between the researchers and participants gave way to a comfortable, free sharing atmosphere which enhanced the quality of the data.”</td>
</tr>
<tr>
<td>Chang <em>et al.</em> 2009 (Malaysia)</td>
<td>Rural region of Malaysia Recruitment was by an announcement of the study through the village headman.</td>
<td>38 adults Age range 21 to 63 years. 24 overweight (63%) 14 obese (37%) Women 55% (n = 21) Men 45% (n = 17)</td>
<td>Six focus groups stratified to gender and ethnicity.</td>
<td>No broad approach specified.</td>
<td>Gender and race/ethnicity considered; No mention of age, or body size of group facilitators.</td>
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<tr>
<td>da Silva <em>et al.</em> 2012 (Portugal)</td>
<td>Recruited prior to surgery in hospital obesity treatment centre</td>
<td>30 adults mean Age 39.1 years. Mean BMI = 47.5 Women 67% (n = 20) Men 33% (n = 10)</td>
<td>Individual interviews Grounded theory, constant comparative method informed analysis</td>
<td>No mention of age, gender, or other characteristics</td>
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<tr>
<td>Diaz <em>et al.</em> 2007 (USA)</td>
<td>Mexico and South Central America Recruitment via flyers in community settings.</td>
<td>21 adults Age range 22 to 81 years. BMI range 25 – 39 Women 90% (n =19) Men 10% (n = 2)</td>
<td>Three focus groups Participants’ heights and weights were measured.</td>
<td>Transcripts analyzed by three independent investigators, one of whom was ethnicity concordant.</td>
<td>Ethnicity, language, and weight considered. “Focus groups conducted by a normal weight, bilingual, Latino investigator and an overweight aide.”</td>
</tr>
<tr>
<td>Granberg 2006 (USA)</td>
<td>South East region of USA Participants recruited from either Weight Watchers or Overeaters Anonymous.</td>
<td>46 participants Mean age 46.6 years, Mean BMI 33.2 prior to attempting and sustaining weight loss Women 78% (n = 36) Men 22% (n = 10)</td>
<td>46 individual interviews Transcript data coded into concepts and themes fitting the theoretical framework explored</td>
<td>No specific mention of gender; age, ethnicity or body size although the researcher/author states she did all the interviews and mentions membership in weight loss organizations.</td>
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<tr>
<td>Study</td>
<td>Year</td>
<td>Country</td>
<td>Methods</td>
<td>Sample Size</td>
<td>Analysis</td>
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<td>Greener et al.</td>
<td>2010</td>
<td>(UK)</td>
<td>To gain an understanding of the beliefs of overweight people about the causes of obesity and effective interventions to reduce it. Recruitment of self identifying overweight participants from public places, GP surgeries, dietetic services and weight management groups. Diverse ethnic and socio-economic backgrounds.</td>
<td>34 men and women age range 18 - 50 years. No details of gender, mean age, mean BMI. 34 individual interviews. Participants self identified as being overweight. Coding and thematic analysis with Framework Approach.</td>
<td>No mention of gender; age, ethnicity or body size of interviewers.</td>
</tr>
<tr>
<td>Heading 2008</td>
<td>(UK)</td>
<td>(Australia)</td>
<td>To explore risk logics, embodiment and issues related to adult obesity. Recruitment from a remote rural community in NSW via newspaper article, posters, adverts and presentations.</td>
<td>19 participants, Ages not given 79% were overweight or obese (n = 15) 4 were “normal weight” but recent history of obesity Women 68% (n = 13) Men 32% (n = 6) 19 individual interviews—face-to-face. Participants were “overweight” “according to their BMI (and observation)”</td>
<td>Thematic inductive coding, constant comparative methods.</td>
</tr>
<tr>
<td>Heintze et al</td>
<td>2011</td>
<td>(Australia)</td>
<td>Patients views for the future of obesity management. Recruitment from solo general practices in Germany.</td>
<td>15 adults Mean age 59 years Mean BMI = 32 Women 73% (n = 11) Men 27% (n = 4) Individual interviews. Inductive qualitative content analysis.</td>
<td>No mention of age, ethnicity of body size of interviewer.</td>
</tr>
<tr>
<td>Herriot et al</td>
<td>2007</td>
<td>(UK)</td>
<td>To gain an insight into previous dieting experiences and current motivators to individuals enrolling in the study at the outset. Recruitment of participants at the outset of a trial of commercial weight loss programmes.</td>
<td>“Baseline sample” 32 adults Mean age 42.3 years Mean BMI = 32 Women 78% (n = 25) Men 22% (n = 7) Follow-up sample; 14 adults Women 86% (n = 12) Men 14% (n = 2) Six focus groups.</td>
<td>Analyzed by one researcher using “long table approach”</td>
</tr>
<tr>
<td>Jones et al.</td>
<td>2007</td>
<td>(USA)</td>
<td>To obtain views of patients attending community clinics on the dietetic service, the outcomes of dietary treatment (includes focus on perceptions of facilitators and barriers). Recruitment of patients from primary care dietetics clinics in Ayrshire, West Scotland. All with BMI &gt; 28.</td>
<td>24 participants 58% (n = 14) over 50 years. All with BMI &gt; 28 Women 75% (n = 18) Men 25% (n = 6) 24 individual interviews (one to one, mainly in the patients’ homes) Content analysis using constant comparative method.</td>
<td>No mention of measurement.</td>
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<tr>
<td>Lynch et al.</td>
<td>2006</td>
<td>(USA)</td>
<td>To explore obese African-American women’s perceptions regarding barriers to weight loss and bariatric surgery. Recruitment of African American women via community organizations in Pittsburgh area. Just over half (51.2%) from lowest income brackets.</td>
<td>41 participants mean age 48.8 years mean BMI 36.3 Women 100% (n = 41) Six focus groups—self-reported height and weight to determine the BMI of each individual. Analysis by two authors with open coding leading to identification of themes.</td>
<td>No mention of gender; age, ethnicity or body size of interviewers.</td>
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<tr>
<td>Authors</td>
<td>Year</td>
<td>Country</td>
<td>Methodology</td>
<td>Sample Size</td>
<td>Analysis</td>
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<td>Ogden and Sidhu</td>
<td>2006</td>
<td>UK</td>
<td>Case study</td>
<td>12 participants</td>
<td>15 interviews</td>
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<td>15 individual interviews</td>
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<td>Ogden, et al. 2006</td>
<td>2006</td>
<td>UK</td>
<td>Qualitative</td>
<td>15 participants</td>
<td>12 interviews</td>
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<td>12 individual interviews</td>
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<tr>
<td>Ostberg, et al. 2011</td>
<td>2011</td>
<td>Sweden</td>
<td>Qualitative</td>
<td>19 participants</td>
<td>5 focus groups</td>
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<td>5 Focus groups</td>
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<tr>
<td>Psarou and Brown</td>
<td>2010</td>
<td>UK</td>
<td>Qualitative</td>
<td>31 participants</td>
<td>Grounded theory analysis</td>
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<td>31 individual interviews</td>
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<tr>
<td>Sabinsky, et al. 2007</td>
<td>2007</td>
<td>Denmark</td>
<td>Qualitative</td>
<td>13 participants</td>
<td>Separated inductive analysis by two authors with open coding</td>
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<td></td>
<td></td>
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<td>13 focus groups</td>
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<tr>
<td>Sarlio-Lahteenkorva</td>
<td>1998</td>
<td>Finland</td>
<td>Qualitative</td>
<td>Total 90 participants</td>
<td>Grounded Theory</td>
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<td>90 individual interviews (face-to-face)</td>
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NOTE: Project sampling and generalisability.
### Smith, et al. 2012 (Scotland)

To describe young adults recollections of adolescent weight awareness and concerns

- Recruited from a cohort who had participated in a study of school children in and around Glasgow
- 35 participants
  - Age 24 years
  - Majority with experience of obesity as adolescent
  - Women 54% (n = 19)
  - Men 46% (n = 16)

Individual interviews following semi-structured guide

Framework Approach to analysis

Accuracy of retrospective recall of experiences from about 10 years earlier.

### Thomas, et al. 2008 (USA)

To better understand similarities and differences in Black and White women’s perceptions about obesity

- The study was conducted at a Family Medicine clinic at a southeastern academic medical center.
- Physicians referred 69 obese female potential participants between the ages of 18 and 70.
- Investigators contacted and screened 56 potential participants (29 Black, 27 White) by telephone for their willingness/appropriateness for participation in the study.
- 30 participants
  - Mean age 48
  - Mean BMI 41.3
  - Women 100% (n = 30)
  - Black 57% (n = 17)
  - White 43% (n = 13)

Six focus groups with race-matched facilitators

Thematic analysis

Facilitators were matched according to ethnicity. There was no mention of gender; age or body size of focus group facilitators.

Investigators involved in the theming were from varied educational backgrounds including a clinical psychologist, a master’s level psychologist, a family physician and a pharmacologist.

### Thomas, et al. 2008a (Australia)

To explore in detail the extent to which people living with obesity have attempted to lose weight, their attitudes towards dieting and weight loss solutions, their opinions about why their weight loss attempts have failed, and suggestions as to what may help them in their struggle with their weight

- Part of a larger study looking at the health and social experiences of people living with obesity in Victoria, Australia. Individuals recruited using articles in local newspaper, convenience sampling and at a later stage purposive sampling techniques to diversify the sample.
- 76 participants
  - Mean age 47 years
  - Mean BMI 42.5
  - Women 83% (n = 63)
  - Men 17% (n = 13)

76 individual interviews either face to face or by telephone

A constant, continuous, comparative analysis was used

No mention of gender; age, ethnicity or body size of interviewers. “Interviews were conducted by a team of five experienced qualitative researchers”.

### Thomas, et al. 2008b (Australia)

To develop an in-depth picture of both lived experience of obesity and the impact of socio-cultural factors on people living with obesity

- A brief report about the study was published in a daily newspaper in Victoria, Australia, to recruit a community sample of clinically obese adults.
- Community sampling methods were supplemented with purposive sampling techniques to ensure a diverse range of individuals were included.
- 76 participants
  - Mean age 47 years
  - Mean BMI 42.5
  - Women 83% (n = 63)
  - Men 17% (n = 13)

76 individual interviews either face to face or by telephone

As above

No mention of gender; age, ethnicity or body size of interviewers.
findings. However, in passing, it should be noted that the majority (22 of 31 studies) highlight in their findings, at least to some degree, the influence of obesity stigma on participants’ perceptions and experiences.

3.1. Contexts and Recruitment

The majority of reports are from authors working in academic institutions in developed countries. Most of the studies are focused on urban populations in these countries. Recruitment settings are divided between community samples (16 studies) and primary health care, outpatient samples and hospital (15 studies). A mix of settings and recruitment strategies is used in the larger studies; some of the community based studies recruited participants active in commercial slimming programs. The sampling setting appears to have been convenience but several studies make a virtue of recruiting either patients or a non-patient community sample in considering the application of findings. Just over half (17) of the studies recruitment contexts are closely linked with interventions to lose weight—study interviews were within a weight management intervention.

3.2. Participant Characteristics

Overall 958 different individuals were involved in the studies (1206 participants if including repeat samples of same individuals within different studies). Women (78.8%) outnumbered men (21.2%) by a ratio of four to one. The best estimate of the mean age of participants is 44 years (mean age was not reported in all studies). Participants mean BMI could be estimated at 37 kg/m² overall; again the mean is not consistently reported. Thirteen studies reported only a BMI range indicating at least degree level educated, from middle to upper socio-economic areas.

3.3. Methodological Approach

Understandably, given space constraints, very few of the reviewed studies reported their methodological approach in any detail but most summarize the approach with reference to established sources. However, in some studies it was difficult to discern any distinct methodological underpinning. Nine studies refer sufficiently to Grounded Theory to be clear that this was the main
theoretical underpinning. Six other studies also refer to Framework Analysis and others to variants of Thematic and Content analysis. Notwithstanding the scantiness and apparent diversity in methodological underpinnings the actual practice of research was similar across studies. Purposive sampling of convenience populations with face-to-face group or individual interviews employed. Twenty one studies (67.7%) involved individual in depth interviews; the remaining ten studies (32.3%) employed focus group methods. Analyses proceeded through multiple stages refining data coding to support inductive analyses.

3.4. Interviewers and Reflexivity

All the studies involved participants who would be categorized as medically obese (BMI 30+ kg/m²). Information on interviewer characteristics was very limited as was discussion of reflexivity. Indeed 22 studies (70.9%) report nothing about the interviewer characteristics. Nine studies do provide some description, mainly of interviewer occupation, gender and ethnicity where this appears relevant to the groups being interviewed. Only three studies give attention to the body size characteristics of the interviewer. The reports from Chan and Gillick [26] and from Granberg [30] are both vague but indicate the interviewers experienced body weight problems themselves. The report from Diaz, et al. [29] is the only one that is explicit in stating that the focus groups were conducted by one normal weight investigator and one overweight aide.

The limitations discussed within the study reports are very weak as regards researcher reflexivity. Eight studies (25.8%) did not include any substantive discussion of limitations. The majority (20 studies, 64.5%) discuss limitations but only in conventional terms for qualitative methods: for example, of potential biases arising from self-selection and convenience sampling, of limits to the generalizability or transferability of findings from a small sample, of potential limitations of group as against individual interviews for acquiring personal views. Only three study reports reflected on how interviewer characteristics could have affected data collection processes and findings. Chan and Gillick [26] and Granberg [30] consider how their own characteristics may have affected recruitment and comfort of participants. Jones and colleagues [35] note that participants may have felt uncomfortable if the interviewer was also a dietician.

4. DISCUSSION

4.1. Review Summary

As far as possible a comprehensive and systematic approach has been taken in this review of the methodology employed in qualitative studies of adults’ experiences of obesity. However, the diverse range and variable quality of studies has necessitated a more exploratory and open review method. A judgment was reached to include studies on the basis that it was clear that most participants were obese and the data were collected by face to face interview. We did not attempt to otherwise weed out weaker studies because we were not concerned with the findings of the studies but with their reported methods. Nevertheless, our review has brought out important issues for qualitative research methods with respect to obesity and allows useful but provisional recommendations to be made about the design and reporting of such studies.

4.2. Strengths in Reviewed Studies

The COREQ guidance for assessing quality in research highlights the value of explicit details of the theoretical position and methods [7]. The theoretical framework has consequences for the approach to establishing the quality and rigor of the study. Our review shows that were this to be strictly enforced then nearly a third of studies of obesity would fall short. However, researchers face a challenge within a short article to provide detailed methodological background. There is also the danger of articles reproducing long justifications that belong in epistemology journals rather than health and social research journals. The majority of studies of obesity provide sufficient pragmatic information appropriate to the publication context and most report clearly the study setting, sampling and methods of data collection with attention to quality issues within these methods.

Likewise, on the whole, the reporting of data analysis and interpretation methods is to a good standard. A better consistency in reporting participant characteristics such as socio-economic background, mean ages and BMI is needed and this is further discussed below. Finally, among strengths, the studies present rich data delivering a depth of understanding of the experiences, in their own words, of people living with obesity. Nevertheless, these strengths must be set against limitations in sampling and a stark lack of researcher reflexivity given the focus of the studies.

4.3. Limitations in Reviewed Methodologies

Whilst obesity affects all social groups it is important in the context of medical research to consider health inequalities more carefully. Inequalities linked to obesity are complex and shifting [14,51]. There is evidence for social class and ethnicity divisions in the prevalence of obesity and, very clearly, in the health consequences of obesity such as diabetes [51-53]. In common with most clinical studies, the qualitative research about obesity is
likely to be biased to those who are better off, middle aged, better educated and without the more disabling co-morbidities that make participation in research difficult. However, the socio-economic biases in particular are difficult to judge from the reviewed papers and this is an important limitation.

Age and gender are more consistently reported. In most societies, obesity prevalence peaks for both men and women in late middle age; so it is perhaps reasonable that the qualitative research reflects a middle aged perspective. Less justifiable is the bias towards women in a ratio of four to one. Obesity is projected to affect a greater proportion of men than women [12-14,52] and it will be critical to understand the distinct perspective and experiences of men rather than generalize from studies of women.

A further important limitation is the lack of attention to how interviewer characteristics influence data collection. Ironically, even the studies concluding that obesity stigma was a key finding did not attend to its potential impact on their own data collection. The evidence more broadly about stigma and obesity stigma in particular indicates that it is a deep rooted psycho-social phenomenon, not readily under conscious control [15]. Communication skills to establish a good rapport with a participant, not readily under conscious control [15]. Communication skills to establish a good rapport with a participant, not readily under conscious control [15]. Communication skills to establish a good rapport with a participant, not readily under conscious control [15]. Communication skills to establish a good rapport with a participant, not readily under conscious control [15].

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