LONG-TERM CONSEQUENCES OF GASTRIC BYPASS SURGERY: A QUALITATIVE EXPLORATION OF PATIENTS' EATING PATTERNS AND BEHAVIOURS

Thesis submitted in partial fulfilment for the Degree of

Doctorate in Clinical Psychology

at the University of Leicester

by

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Declaration

I, Nicola Jane Buccheri, confirm that this thesis is my own original work, excluding where other authors have been referenced. It has been submitted in partial fulfilment of the degree of Doctorate in Clinical Psychology and no part of it has been submitted for any other degree or academic qualification.

Long-term Consequences of Gastric Bypass Surgery: A Qualitative Exploration of Patients' Eating Patterns and Behaviours

Submitted in April 2012

by

Nicola Jane Buccheri

Section A: Thesis Abstract

Obesity is a growing problem throughout the world and accompanies many physical and psychological issues. Increasingly Bariatric Surgery is being turned to as a means of losing weight, often after many failed attempts to use diet and exercise. The focus of this project is on the experiences of patients who opt for Bariatric Surgery.

The literature review explored the qualitative studies on experiences after Bariatric Surgery. It adopted a Narrative Synthesis approach and the findings were analysed for themes. A total of twelve papers were included and three main themes emerged. They were titled "Transformation", "Adjustment & Coping" and "The Paradoxes". The review highlighted clinical recommendations regarding patients unmet needs after surgery and suggested topics for further research.

The research report explored the longer term experiences of patients who had undergone Gastric Bypass Surgery (GBS), which is a frequently used procedure for weight loss. The study utilised Grounded Theory techniques to collect and analyse the data. Seventeen participants were interviewed, all of whom had undergone GBS three to eight years ago. A core category titled "The Battle for Control" was found to permeate the majority of experiences pre and post surgery. A theoretical model was devised to propose factors that enabled the participants to develop self-control after surgery, such as viewing the bypass as a tool and learning to self monitor. It also outlined circumstances that impeded this process, such as finding ways to cheat the bypass. Issues relating to food addiction and body image also emerged from the data. The findings are discussed in relation to existing literature, along with theories relating to self-efficacy and locus of control. Further recommendations for clinical practice and research are also given.

The critical appraisal is a reflective, personal account that discusses some of the important issues relating to quality in qualitative research.

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Qualitative Research on Experiences after Bariatric Surgery: A Narrative Synthesis

Submitted in April 2012

by

Nicola Jane Buccheri

To the University of Leicester, School of Psychology, Clinical Section

In partial fulfilment of the degree of

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Qualitative Research on Experiences after Bariatric Surgery: A Narrative Synthesis

1. Literature Review Abstract

The quantitative literature exploring Bariatric Surgery lacks consensus surrounding the factors that predict its success and outcomes. The current review aimed to explore the qualitative literature on patients' experiences after having Bariatric Surgery in order to determine whether this body of research could illuminate the issue. The review adopted a Narrative Synthesis approach and a thematic analysis was conducted. Twelve papers were included in the review and three overarching themes emerged which were titled "Transformation", "Adjustment & Coping" and "The Paradoxes". A high degree of variability was found within each theme which accounted for positive and negative experiences. Also, concerns relating to control and appearance emerged as prominent issues. The review recommended that, after surgery, services seek to address the unmet needs of Bariatric Surgery patients, particularly those related to changing eating behaviour. Further research exploring the impact of surgery in the longer-term was one of the research recommendations made.

Key Words: Obesity, Bariatric Surgery, Weight Loss Surgery, Qualitative Research.

Target Journal: Obesity Surgery

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*See appendix A for "Author Guidelines for Obesity Surgery".

2. Introduction

2.1 Background

2.1.1 The obesity epidemic. The issue of obesity is becoming an increasingly significant problem, in both an individual and societal sense. The World Health Organisation (WHO) has warned that we are facing an "Obesity Epidemic", reporting that around 2.8 million adults die each year due to weight-related comorbidities (WHO, 2011). In 2008 the WHO estimated that around one tenth of the world's adult population was obese. The WHO also pointed out that obesity was once primarily linked to western civilisation and high-income countries, with the "pandemic" originating in the United States of America. This has also changed in recent years, with obesity rates on the increase in developing countries (Misra & Khuana, 2008).

2.1.2 What does "Obesity" mean? Given the media attention and government concerns, the phrase "obesity" has become more familiar, with many of us having some awareness of its meaning. The term "obesity", in its medical guise, refers to a body mass index (BMI) of thirty or more and is defined as "abnormal or excessive fat accumulation that may impair health" (WHO, 2011). The term "Morbid obesity" goes on to separate out individuals who have a BMI of forty or more, and are therefore, significantly more likely to develop serious health consequences as a result of their weight. These definitions do not take into account the true essence of living in a world where obesity is on the increase and cannot reflect the individual experiences of those whose lives are touched by this issue. Nevertheless, the BMI definition is important because it often dictates the help available for people who are obese.

2.1.3 Consequences of obesity. Obesity is, in fact, the fifth leading global killer, as a raised BMI is a major risk factor for the development of diabetes, heart disease, certain cancers (endometrial, breast and colon) and musculoskeletal problems,

such as osteoarthritis (WHO, 2011). The physical consequences of obesity are given much government and media attention. However, the psychological impact has been relatively underplayed in many major documents advising on obesity. Nevertheless, research has shown that obesity is linked to many psycho-social issues, such as depression (Stunkard, Faith & Allison, 2003), poor quality of life (Kolotkin, Meter & Williams, 2001) and body image problems (Shwartz & Brownell, 2004). Furthermore, people who are perceived as overweight are often subject to social stigma and discrimination (Dymek, LeGrange, Nevern & Alvedy, 2001).

2.1.4 Bariatric Surgery. Many attempts have been made to address the issue of obesity. Interventions have included medication, dietary and exercise regimes, as well as cognitive behavioural programmes. However, the outcomes for individuals who are morbidly obese have been quite poor (Buchwald & Oien, 2008; Santry, 2005) due to many people failing to engage with the interventions or struggling to maintain any benefits from doing so. As a result of this, there has been an increase in the number of people turning to surgery to address their weight issues.

Bariatric Surgery has been around for over twenty years and is recommended by the National Institute for Health and Clinical Excellence (NICE, 2006) for individuals who are morbidly obese and those who are moderately obese, but at serious risk due to physical co-morbidities. Bariatric Surgery is an umbrella term covering several different types of surgical procedures designed to facilitate weight loss. All bariatric procedures work by limiting the amount of food that the body is able to digest. Where they differ is through the mechanisms by which this limitation is achieved, which can be classed as ‘malabsorptive’ ‘restrictive’ or a combination of the two (Colter, 2004).

Malabsorbtive surgery shortens the length of the digestive tract, thus reducing the amount of food absorbed by the body. Restrictive surgery involves limiting the size

of the stomach by creating a small pouch for food to enter, which in theory, reduces the amount of food required to feel physically full. The most common procedures are that of the Roux-en-Y Gastric Bypass (a combination of both mechanisms) and the Laparoscopic Gastric Banding (LAGB, a restrictive procedure).

2.1.5 How effective is Bariatric Surgery? The increasing literature exploring the outcomes of bariatric surgery is both interesting and curious, in the sense that there seems to be a lack of consensus surrounding how effective it is. Within the medical world, bariatric surgery is considered one of the only weight loss treatments able to demonstrate long-lasting effects in the reduction of weight and comorbidities (Schouten, et al., 2010).

However, it has become increasingly acknowledged that surgery is not effective for all patients, and a high variability in outcomes are reported. Some studies have found that patients have been unable to maintain weight loss in the long-term (Picot et al., 2009). Others have suggested that around 20 to 50% of patients find that they do not achieve their desired weight loss, with some presenting back into services after surgery (Magro et al., 2008). Psychosocial outcomes also varied, with some studies reporting that surgery leads to improved quality of life (Heo et al. 2003), reduced depression (Burgmer et al., 2007) and reduced eating pathology (Larsen et al., 2004). Whilst others suggested that surgery has the potential to reinforce psychological problems which can lead to reduced quality of life (Van Hout, Verschure & Van Heck, 2005).

In attempts to address this, many studies have explored factors that might predict how patients respond to bariatric surgery. Studies have investigated pre-morbid issues, such as psychiatric history, past experiences of trauma and personality traits, along with issues relating low self-esteem, expectations of surgery and pre-existing

eating patterns. However, the findings are varied and unable to shed any conclusive light on the issue.

Some studies suggested that existing psychological problems and disordered eating patterns predict poorer outcomes (Sallet et al., 2007), whereas others found no evidence to suggest this (Colles, Dixon & O'Brien, 2008; Martikainen et al., 2004). Another body of literature proposed that post-surgical factors such the ability to adhere to dietary instructions and attending post-surgery clinic visits were involved in more favourable outcomes (Schouten et al., 2010).

Several literature reviews have attempted to integrate these findings (Livhits et al., 2012; Franks & Kaiser, 2008; Herpertz et al., 2004) with all of them concluding that the results are mixed, and that further research is required to enhance our understanding of these issues. As it currently stands, the evidence regarding characteristics that make a "candidate" suitable for bariatric surgery is conflicted and inconclusive.

Nevertheless, the literature does agree that there is a high degree of variability in outcomes for bariatric surgery, reflected in both physical and psycho-social effects. Therefore, it is fair to say that quantitative research reducing the complexity of data to mean variables is of limited worth in making predictions with regard to the suitability of surgery for any individual patient. Qualitative research may be more informative, as it may illuminate as to why and how certain correlations have been found between certain variables and outcomes. It can also retain the intricacy of individual experiences and can allow participants the freedom to express themselves beyond the limits of predetermined concepts that have already been identified.

2. Aim of the Current Review

The overall aim of the current review was to synthesise the qualitative literature available on patients' experiences after bariatric surgery in order to complement the existing quantitative reviews.

3. Materials and Methods

In order to conduct this literature review a Narrative Synthesis approach was chosen. The guidance developed by the Economic and Social Research Council (ESRC) outlined by Popay et al. (2006) was drawn upon in order to adopt a systematic and transparent approach to the synthesis. Narrative Synthesis is a way of bringing together evidence in a systematic review by summarising the findings of multiple studies and presenting them in a way that tells a story (Miller, Bonas & Dixon-Woods, 2007).

3.1 Constructing the Review Question

After an initial scoping exercise exploring the literature around the outcomes for bariatric surgery, it was observed that quantitative research was unable to provide any conclusive answers. Hence, the synthesis of qualitative literature was felt to make a highly appropriate and valuable contribution to the existing systematic reviews. As a result, the current review question focused on patients' experiences after bariatric surgery as reported in qualitative studies. More specifically the question answered was "What are the experiences of patients who have had bariatric surgery?".

3.2 Search Strategy

In the development of the search strategy the guidance outlined by Shaw (2010) was referred to (see Appendix B). The following databases were searched to include literature from medical and psychological backgrounds: Medline, PubMed, PsychInfo, ISI Web of Knowledge, Science Direct and Scopus. Furthermore, the search strategy

was extended to the online Journal of Obesity Surgery (via Springer Link) and the NHS evidence databases. In addition, the reference sections of all potential articles were scanned to check that the search strategy had taken into account all relevant articles. The search strategy was repeated on three occasions (see appendix C) in order to ensure that all up to date research was included.

3.2.1 Search terms. In order to identify the search terms the "CHIP Tool" developed by Shaw (2010) was utilised. CHIP is an acronym (Context, How, Issues and Population) for identifying the various study components that need to be considered when developing the search strategy and terms. Table 1 shows how this was utilised within the current review.

Table 1: Use of the CHIP Tool in the Search Strategy

Study Components	Description	Search Terms
Context	Bariatric Surgery	"Bariatric Surgery", "Weight Loss Surgery", "Obesity Surgery" "Gastric Bypass", "Gastric Band", "Roux-en-Y"
How	Qualitative	"Qualitative"
Issues	Patient Experiences after having Bariatric Surgery	"Post Surg*" "Outcome" "Experiences"
Population	Adults of all ethnic backgrounds aged 18 to 65.	"Patients" "Adults"

3.2.2 Inclusion/exclusion criteria. The review included all qualitative studies worldwide exploring adult patients' accounts of life after bariatric surgery. However, only studies that were written in English, peer-reviewed and conducted within the last ten years were included. Any studies investigating adolescent bariatric surgery were excluded because it was felt that this population would bring with it a unique set of experiences that may differ to those of an adult population. Any papers reporting the

experiences of carers or healthcare professionals were also excluded. In order to determine whether or not a paper matched the criteria, all abstracts were screened. If an abstract proved insufficient to determine inclusion, the full text was consulted. Papers that included some qualitative components, but were primarily quantitative in nature, were excluded.

3.3 Assessment of Quality

In many systematic reviews quality is typically determined using structured checklists that comprise a broad set of inclusion criteria aimed at assessing trustworthiness and reliability (Dixon-Woods et al., 2006). Some researchers have argued that using this approach when making sense of complex qualitative literature is of little advantage and that "intuitive expert judgement" holds more worth (Miller et al., 2007, pp 200). In line with the ESRC guidelines a quality appraisal checklist was not used for this review. Much thought and debate went into this decision and it was agreed that the appraisal of quality would be conducted by the author using pre-existing knowledge of qualitative research methods and clinical judgement. Notes on quality were recorded for each paper and are presented in Table 2. The review adopted a low threshold approach in order to ensure that a wide variety of papers were included. Only papers that were "fatally flawed" were excluded. In order to identify "fatally flawed" papers the criteria adapted by Dixon-Woods et al. (2006) was followed (see Appendix D) and any papers suspected of being so were discussed in supervision. Finally, a data extraction form (see Appendix E) was devised to assist in drawing out specific pieces of relevant information that aided the quality appraisal.

3.4 Synthesis of Evidence

Whilst appraising the quality of each paper notes regarding its findings were taken (see Table 2). Thematic analysis was used to identify the main, recurrent themes based on the review question. Popay et al. (2006) pointed out that transparency is required when using thematic analysis so that that the reader is fully informed as to how the analysis was conducted. In order to do this, the guidelines for thematic analysis outlined by Braun & Clarke (2006) were referred to. In the current review any concept that occurred more than once or was found to capture something important about experiences after bariatric surgery was counted as a "theme".

3.5 Author's Position

It is important to acknowledge the potential for the author's background to bias the review process. The author is a trainee clinical psychologist who acknowledges a familiarity with the research literature from working in a medical psychology context and throughout studies as a trainee. In order to minimise the impact of this bias and ensure that the results presented are a true reflection of the literature, the author kept a reflective journal to monitor thought processes surrounding the review, and reflected upon these issues in supervision.

4. Results

In the initial phases of the search strategy a total number of 2536 articles were returned. After analysing these for evidence of the inclusion/exclusion criteria, (see Appendix F for an overview of this process) 12 papers were found to be relevant to the review question and underwent a process of data extraction and quality appraisal. Table 2 provides an overview of the characteristics of each study.

Table 2: A Summary of the Characteristics of the Studies Included in the Review

Article, Place of Origin & Affiliated Discipline(s)	Sample Characteristics	Qualitative Methodology and Analysis	Identified themes/categories/headings	Comments
Bocchieri et al. (2002) **Las Vegas, USA** **Psychology**	Thirty-one (23 female) patients who had undergone gastric bypass surgery (GBS). Ninety-four percent were European-American and 6% were Latino. The mean age was 41 years (range 30 -53). The time elapsed since surgery ranged from six months to 11 years (mean of 28 months).	Grounded Theory study. Twenty-two patients were interviewed. Whilst eleven took part in the male- or female- only focus groups.	Core Category: - Rebirth/Transformation Related Categories: - Creation of a dichotomy between pre-surgery (old) life and post-surgery (new) life - Positive changes - Tension generating changes - Negotiation of tension in multiple areas	No use of participant quotations. The coding process is not explicit and some code labels raise some questions as to how "grounded" in the data they are. Also, no discussion of saturation, reflexivity, epistemological stance or ethical considerations.
Earvolino-Ramirez (2008) **Texas, USA** **Nursing**	One Caucasian female participant aged 55 who had undergone bariatric surgery (no procedure specified) eight months prior to the interview.	Case Study design using hermeneutic phenomenology. The data was collected via an interview and the transcripts analysed for themes.	Main Themes: - Be careful who you tell because the stigma continues - Totally different but still evolving - Physical change - Mental adjustments - Changes in outlook	The interview took place in a coffee shop, thus giving rise to some issues relating to confidentiality and authenticity of the information discussed. Trustworthiness and bias issues were discussed. Uses

				quotations to enrich the findings.
Engstrom et al. (2011) **Sweden** **Medicine**	Sixteen participants (12 females), aged 24-44 years (mean 36.8 years). Weight loss procedures not stated.	Grounded Theory Study. All 16 participants were interviewed 1 year after surgery. Eleven were interviewed again 2 years after surgery.	Core Category: - Wishing for deburdening through a sustainable control over eating and weight. Related Categories: - Hoping for deburdening and control through surgery - Feeling deburdened and practising control through physical restriction - Feeling deburdened and trying to maintain control by own willpower	This Swedish study was part of a larger study examining the outcome of two different surgical techniques. It considered ethical aspects and clearly reported Grounded Theory methods utilised, making reference to saturation. The meaning of the category labels were initially somewhat difficult to grasp. Furthermore, the degree to which they are grounded in the data is questionable due to use of terms such as "Deburdening" and "Constructing".
Groven et al. (2010) **Norway** **Medicine**	Five female participants aged from 25 to 45. No details regarding type of bariatric procedure.	Semi-structured interviews were conducted and the transcripts were analysed for themes. No further information given.	Headings: - Healthy but worried about their situation - A positively life-transforming period - Unexpected pain and loss of energy	Norwegian Study. Part of a larger study not yet published. Study gives details of the sample from the larger study, without being specific about the 5 females the paper is reporting. It makes

			- The radical change of bodily appearance - Feelings of being damaged on the "inside" - Comparing one's old life with the "new" life	reference to epistemological stance. The mean time elapsed since surgery is incalculable due to phrase like "a few" used within sample description. The method of analysis is explicit and quotations were used to demonstrate generated themes. Saturation is not discussed, despite some generalisation of the findings.
Le Page (2010) **Florida, USA** **Nursing**	Twelve participants (8 female) who had undergone GBS 2 to 9 years prior to the study. They were recruited through a flyer.	Participants underwent a semi-structured interview. The data was analysed using a phenomenological method informed by van Manen's hermeneutic approach.	Overarching Theme: - Paradox Further Themes: - Surgery as Renewed Hope - Finding the Balance - Filling the Void - Transformation of Self-Image.	All participants were enrolled in private insurance plans that covered the procedure. Ethical issues and reflexivity were considered. The data analysis and process of saturation is not overly explicit, despite saturation being claimed. Quotations were used to enrich presentation of themes.
Magdaleno et al. (2010) **Brazil**	Seven Brazilian female participants aged 28 to 49. Time since surgery was 3 months to 2 years 11 months	Participants underwent a semi-structured interview. The transcripts were analysed using	Headings: - Social Reinsertion - The Recovery of Self-esteem and Identify	The participant recruitment process was classed as purposive. Study claims saturation, but did not explore

Medicine & Psychology	(mean of 1 year 2 months).	content analysis.	- The Risk of Disillusionment	this in any depth. The process of analysis is not explicit and the explanation of categories was very brief. No indication with regards to reflexivity, epistemological stance or ethical considerations was given.
Magdaleno, R (2011). **Brazil** **Medicine & Psychology**	Seven Brazilian female participants aged 28 to 49. Time since surgery was 3 months to 2 years 11 (mean of 1 year 2 months).	Semi-structured interview. The transcripts were analysed using content analysis.	Headings: - Improvement in Body Image: Acceptance and Defencelessness - The problem of Skin Folds, Flaccidity and Scars.	The authors appear to have used the same data as the previous study. Therefore the same comments apply.
Ogden et al. (2006) **England** **Psychology & Medicine**	Fifteen (14 female) patients who had undergone weight loss surgery (bypass or band) an average 16 months prior to the study.	Participants underwent a semi-structured interview containing open ended interview. The interviews were analysed using Interpretive Phenomenological Analysis (IPA).	The data are reported under the following headings: - Personal Histories - Decision making - Impact of surgery - Impact of weight loss	This appeared to be part of a larger study. Homogeneity of sample is compromised due to it containing participants who underwent different weight loss procedures and two participants are reported as having additional surgery. Data analysis process is very clearly stated; however the themes

				were not explicitly labelled. Quotations were used to enrich results. Reflexivity and epistemological stance were considered.

Ogden et al. (2011)
 	
Psychology
 	
England
	Ten (8 female) participants recruited via an obesity clinic and patient support group.	Interviews were conducted and analysed using Interpretive Phenomenological Analysis (IPA).	Headings:
			- Failed WLS
			  o The operation failed
			  o Cheating the operation
			  o Emotional Regulation
			  o Neglected Mind
			- Successful WLS
			  o Changed eating behaviour
			  o Changed mindset
				Seven of the participants had gone on to have another weight loss procedure which they felt was successful. As this study uses IPA, this questions the homogeneity of the sample. No reference to epistemological position, reflexivity or ethical issues.

Sutton et al. (2009)
 	
Florida, USA
 	
Nursing
	Fourteen females aged 40 to 59 who had undergone GBS. Unable to ascertain time since surgery within the sample due to lack of description.	Participants took part in semi-structured interviews that were analysed for themes.	Headings and Themes:
			- Immediate postsurgical period:
			  o Pain
			  o Buyer's Remorse
			- Discharge to home:
			  o Adherence to restrictions
			  o Lack of hunger
			- The first 6 months:
			  o Weight Loss
			  o Coping with Loss
			- The second 6 months:
				Reflexivity and epistemological stance is considered. The data analysis was not explicitly clear (e.g. no reference made as to what was meant by "theme"). Saturation was referred to, but not explored in any depth. The data are organised into time frames which could question the degree to which themes are

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			○ Achievement of goal weight ○ Slowing down of rate of weight loss	grounded in the data. Furthermore, the presentation of the findings does not make the themes explicitly clear due to uncertainties with regards to thematic labels.
Wysoker (2005) **New York, USA** **Nursing**	Eight (5 female) participants aged 38 to 57 years. All had undergone weight loss surgery one year prior to the interview. The specific procedures are not documented.	Participants were interviewed and the transcripts were analysed using a phenomenological approach incorporating the constant comparative technique.	Themes: - Last Resort - Surgery Provides Structure - Reality Sets in - Positive about the decision to have the surgery	Very little in terms of reflexivity, epistemological position or ethical issues. Saturation is briefly mentioned but not explored in any depth. The study claims to address the "long-term" care of bariatric patients, yet only interviewed participants one year after surgery. The generalisations are also questioned due to unclear saturation claims.
Zijlstra et al (2009) **Holland** **Medicine & psychology**	Eleven (10 females) participants with a mean age of 46 years who felt that their gastric band surgery had been "unsuccessful".	Participants were interviewed and the methodological approach undertaken was reported as that of "interpretive methodology	Headings: - Being overweight as a youngster - Explanations for gaining weight - A history of unsuccessful dieting - Testing the limits of the gastric	The process of coding is very clearly stated. No reference to epistemological position, reflexivity or ethical issues is made. Quotations to enrich the results. No discussion of saturation, yet some evidence

	band	of generalisation and attempts to link findings with preconceived ideas (e.g. Stages of Change model).

4.1 Quality of Papers

Out of the twelve included papers, eleven were considered to be poor in quality due to methodological weaknesses. One paper by Ogden, Clementi & Aylwin (2006) was considered to be of an acceptable standard, yet still raised some questions with regards to the researchers' methodological approach. None of the papers were found to be "fatally flawed" as it was felt that they all gave reasonable descriptive accounts relevant to the criteria outlined by Dixon-Woods et al. (2006). However, many of the papers failed to adequately address certain issues that are relevant to qualitative research which will now be explored further.

One of the main issues evident when appraising the papers was the lack of information detailing evidence of the researcher's reflexivity. Furthermore, the majority of the studies did not provide any information about the epistemological stance they had taken. Ogden et al. (2006) and Sutton, Murphy & Raines (2009) were the only articles that considered reflexivity issues and were explicit about their epistemological position. Another critical point was the lack of information regarding ethical issues. Furthermore, several papers did not provide any quotations to support their findings, despite having conducted interviews. This raised queries as to how well the themes were supported by evidence and grounded in the data.

The author also had some concerns regarding the Engstrom & Forsberg (2011) paper. It used Grounded Theory methodology and clearly explained the process of data analysis. However, the categories identified raised some questions as to how grounded they were in the data due to categorical labels referring to terms more commonly used by healthcare professionals, than patients. Examples of these included the use of words such as "Deburdening" and "Construction". Speculation suggested that, given that this

was a Swedish study, there may have been some translation issues when writing the paper for an English language journal. The article was included in the review, as this issue did not suggest it was fatally flawed or unable to make a useful contribution.

Both Ogden et al. (2006; 2011) papers used Interpretive Phenomenological Analysis (IPA). Within IPA the sample should be adequately homogenous for the methodology to be suitably utilised. Some questions were raised with regards to this given that both samples contained people who had different surgical procedures. The experiences of those having a gastric bypass may differ to those who have undergone a gastric band operation due to the different mechanisms by which weight loss is induced by the different procedures. Therefore, this raised some concerns with regards to the suitability of IPA as a methodology for this sampling frame.

The quality issues discussed and summarised in Table 2 highlighted some concerns regarding the reliability and trustworthiness of the papers included in the review. The author would like to state explicitly before providing a narrative synthesis of the evidence, that the reader must use caution when interpreting the findings of the review. None of the papers were "fatally flawed", but the finding that the majority were considered to be of weak quality, must be held in mind.

4.2 Narrative synthesis of the evidence

The thematic map presented in Figure 1 provides a conceptual overview of the thematic analysis of the twelve papers included in the review.

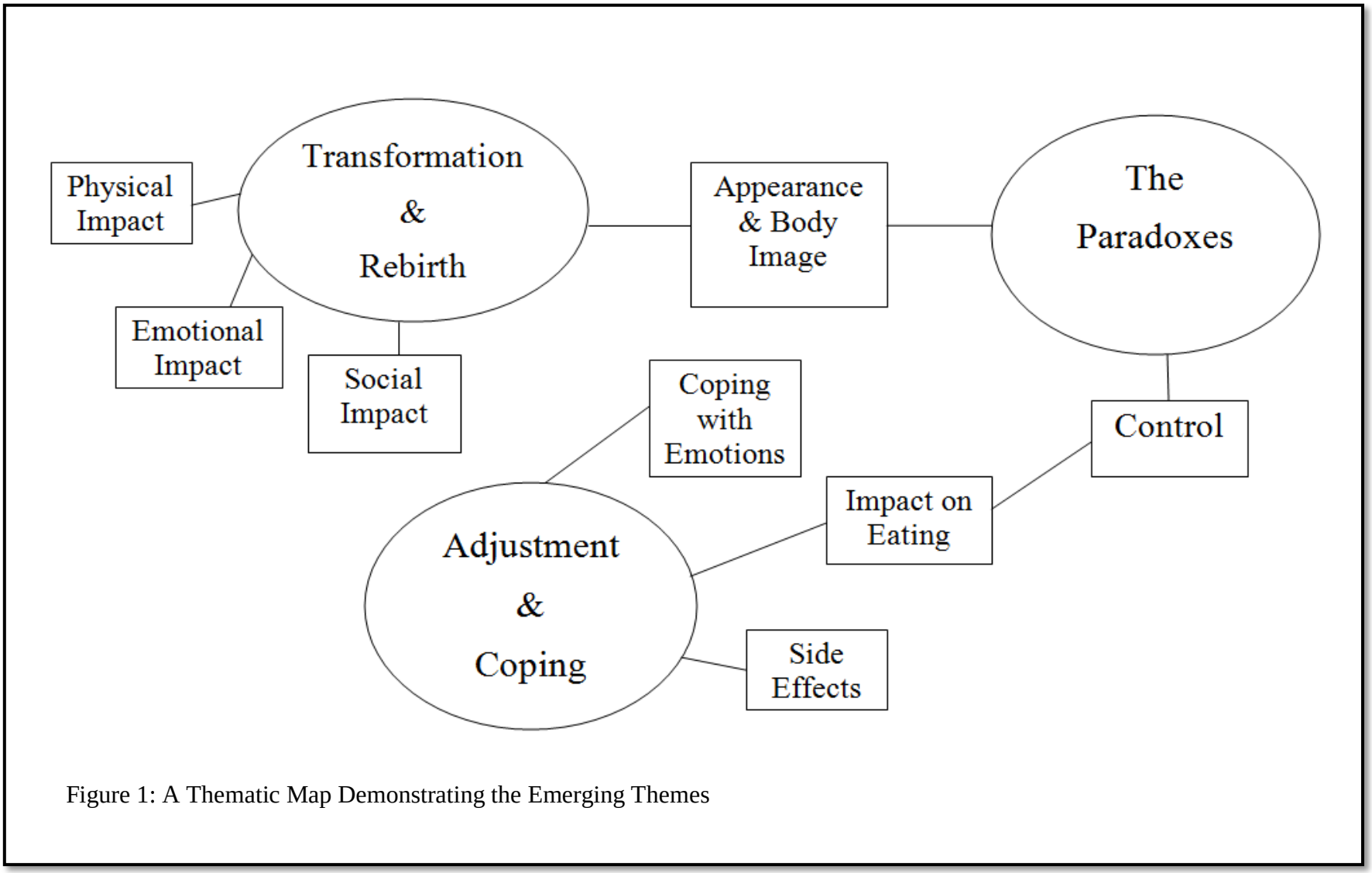

Figure 1: A Thematic Map Demonstrating the Emerging Themes

Three overarching themes emerged and were titled “Transformation & Rebirth”, “Adjustment & Coping” and “The Paradoxes”. Each theme also contained several sub-themes which are now discussed. Several quotations (*italicised*) have been used to support the themes and enrich the account.

4.2.1 Transformation & rebirth. Many of the studies described the physical, psychological and social impact of bariatric surgery. The overarching theme of “Transformation & Rebirth” emerged from the literature within these descriptions. This theme was broken down into three sub-themes to encapsulate the different elements of the change process. Within this, both positive and negative changes were evident, with participants reporting a wide variety of different experiences.

4.2.1.1 Physical Impact. The literature suggested that many physical changes occurred following surgery (Bocchieri, Meana & Fisher, 2002; Earvolino-Ramirez, 2008; Groven, Raheim & Engelsrud, 2010; Sutton et al. 2009). These were dramatic weight loss, increased mobility and improvement of comorbidities, such as diabetes.

“The first month I lost like 30-something pounds and then I pretty much lost like 10-12 pounds every month after that” (Sutton et al. 2009).

Others studies reported some of the negative physical health complaints that were experienced by some patients after surgery, which included pain and lack of energy (Groven et al., 2010; Sutton et al., 2009; Zijlstra, Boeije, Larsen, van Ramshorst & Geenen, 2009).

“After a day at work I am so tired. When I come home I can hardly unlock my front door and I am living with constant pain” (Groven et al., 2010).

Another issue that could be construed as relating to the physical impact of surgery was that of having loose skin. Many patients described having loose skin after surgery due to the rapid manner in which they lost weight. This linked into a sub-theme regarding "Appearance & Body Image" because many participants also found that having loose skin led to conflicting feelings about their bodies. This will be elaborated on shortly.

"Now I'm no longer fat but I have flab, loose skin and everybody looks at me the same way"(Magdaleno, Chaim & Turato, 2011).

4.2.1.2 Psychological impact. In terms of the psychological impact of surgery, some studies reported improvements in mood, self-esteem and confidence (Wysoker, 2005; Ogden et al., 2006; Magdaleno, Chaim & Turato, 2010).

"After I was operated, I was born again. I was born for a happy life. Before, I was sad." (Madaleno et al., 2010).

Other findings suggested that the positive psychological impact of surgery was not maintained in the long-term for some patients. Some described becoming more aware of their existing problems, particularly related to eating, which they felt had not been addressed through surgery (LePage, 2010; Odgen et al., 2011).

"I was 430lbs and I thought this would be the most wonderful thing in my life and in the beginning it was. I lost 230lbs, the surgery went well, no complications, but mentally it did not work very well. We did not get to the core issue of why I was eating myself to death" (LePage, 2010).

4.2.1.3 Social impact. Another theme that emerged was the social impact of surgery. Several studies found that, after surgery, patients experienced quality of life

improvements related to being more physically and socially active (Bocchieri et al., 2002; Ogden et al., 2006; Earvolino-Ramirez, 2008; Magadaleno, et al., 2010;), feeling more optimistic about their working lives (Ogden et al. 2006) and feeling more accepted by others.

> *"I realised there was a life and I would be able to work because I was petrified of losing my career, my life, everything" (Ogden et al. 2006).*

Another social factor emerging within the literature was that of the impact of surgery on relationships. Here the literature became conflicting. Some studies reported that surgery improved intimate/martial relationships (Bocchieri et al., 2002). Whereas others found that surgery could lead to difficulties and dissatisfaction within these relationships.

Furthermore, the literature suggested that friendships were also altered after surgery in quite a complex way, with some findings reporting participants' experiences of making new friends, losing old ones and feeling animosity towards those who started to treat them better after losing weight. Therefore, the literature suggested that the impact of surgery on relationships was multifaceted and highly dependent on each individual's set of circumstances.

> *"You're not the fattest person in the family anymore. So 'you' changes, you know, and your role changes" (Earvolino-Ramirez, 2008).*

4.2.2 Adjustment and coping. The theme of "Adjustment & Coping" emerged within the literature with studies describing different elements of this which were broken down into three sub-themes.

4.2.2.1 Side-effects. Several studies described the side-effects of having surgery and how patients learnt to cope with them (Wysoker, 2005; Odgen et al., 2006, Zijstra et al., 2009). The side-effects were linked to unpleasant experiences after eating, particularly vomiting. The literature suggested that the way in which patients cope with the side-effects differed greatly, as did their experience of them. Some found ways of adapting to them, whilst others struggled to do so.

> *"You'd be sick all the time...where could I be sick? How could I be sick quietly? I developed how to be sick, you'd flush the chain and be sick at the same time" (Odgen et al., 2006).*

The experience of side-effects caused some patients to change their eating patterns for the better, in attempts to reduce them. Others coped with their side-effects by substituting the difficult to digest foods, such as meat and bread, for those more easily tolerated, but often higher in fat and calories. Hence, the way in which patients coped with the side-effects after surgery influenced how they perceived the outcomes of their surgery and whether or not they gained weight in the longer-term.

4.2.2.2 Changing eating behaviour. Another theme that emerged related to the impact of surgery on eating behaviour and how patients changed this as they adjusted to surgery (Bocchieri et al., 2002; Odgen et al., 2006, Zijstra et al., 2009, Odgen et al., 2011). As with other themes, the findings varied greatly. Some patients learnt to make healthier food choices and eat smaller portions, whilst learning to avoid the unpleasant side-effects. Others described the difficulties in changing eating behaviour and gave examples of how they attempted to fulfil their food desires by "cheating" the operation.

> *"I found that if I chewed food tremendously to a pulp I could actually get more of it and quite frequently" (Ogden et al., 2011).*

4.2.2.3 Coping with emotions. Prior to surgery food often played a huge role in regulating emotions for many patients. After surgery, some patients found they were able to develop alternative coping strategies for managing their emotional states (Bocchieri et al., 2002; LePage, 2010; Ogden et al., 2011).

"I realised I couldn't use food anymore and I would have to figure out another way to cope" (Sutton et al., 2009).

However, a patient's ability to address issues related to emotional eating varied greatly, with some studies exploring how patients would continue to eat in response to their emotions.

4.2.3 The paradoxes. The final theme that emerged was titled "The Paradoxes" as it represented two different areas in which the participants described having conflicting and paradoxical feelings.

4.2.3.1 Control. The theme of control emerged within the literature (Odgen et al., 2006; Engstrom & Forsberg, 2011; Odgen et al., 2011) and appeared to be a concept that patients felt conflicted about. Findings suggested that control was linked to the change in eating behaviour, in the sense that, having surgically imposed limitations and lack of choice, paradoxically led to a renewed sense of control for some patients.

"If I eat too much I'm sick so I don't have the control anymore...that's a good thing because I couldn't control it on my own" (Ogden et al., 2006).

The literature also attempted to account for how control is experienced by the patients who struggled to change their eating behaviour. For this sub-section of patients, the findings suggested that they perceived the surgery as failing to offer them sufficient control over their eating.

4.2.3.2 Appearance & body image. The final sub-theme was that of "Appearance & Body Image". It linked to the main themes of "Transformation & Rebirth" and "The Paradoxes" because it was associated with the change process that occurred after surgery, but was also a source of internal conflict.

The literature provided descriptions of how surgery changed a person's physical appearance, resulting in a "thinner self". The paradoxical element of the "Appearance & Body Image" theme related to findings that, although patients were happy that they have lost weight and appear "thinner" to others, they were still unhappy with their bodies due to the loose skin (Engstrom & Forsberg, 2011; Magdaleno et al., 2011).

"I have periods when I upset myself a lot. I just want to cut everything away, everything that is hanging out. I mean, I almost wish all the kilos back just to fill out the skin" (Engstrom & Forsberg, 2011).

Furthermore, some of the literature suggested that patients also had some fears about others noticing their new appearance and with being found attractive.

"You feel a little more desired....but I haven't learned to cope with this situation yet" (Magdaleno et al., 2010),

5. Discussion

5.1 Summary

The literature contained within this current review was considered to be weak in quality, apart from one paper (Ogden et al., 2006). Intuitive expert judgement (Miller et al., 2007) was adopted over the use of a structured appraisal tool, which does raise some issues relating to the difficulties in making claims regarding the transparency of the process. However, given the relevance of the research question, and lack of qualitative

studies in the area, it was felt that this approach enabled the inclusion of interesting and worthwhile papers that may have been excluded using a structured appraisal tool. Nevertheless, because this approach was utilised, the findings need to be interpreted with caution and further research is required.

Three main themes emerged from the literature; "Transformation & Rebirth", "Adjustment & Coping" and "The Paradoxes". Within each of them a range of positive and negative experiences were evident. This is consistent with the conflicting findings of the quantitative literature and may begin to shed some light on the wide variation found.

An important finding of the review related to the theme of "The Paradoxes". Qualitative research is valuable because it enables the exploration of ideas that are not bound by preconceived categories. What emerged was the notion that, after bariatric surgery, patients experienced conflicting feelings regarding self-control in relation to their eating and also how they felt about their bodies.

There may some scope to explore these ideas further, with additional research investigating how people make sense of these conflicts and work to resolving them. However, given the dearth of good quality research included within the review it is worthwhile suggesting that further investigation is necessary before any formal conclusions can be made.

5.2 Recommendations

5.2.1 Clinical. A number of clinical recommendations can be generated as a result of the findings. First of all, support for patient who had not addressed pre-existing issues with food is required to tackle these unmet needs. Furthermore, those who

struggled to develop alternative coping strategies to eating would benefit from some support in doing so. Also, since a number of people spoke of struggling with issues relating to body image, they may benefit from the opportunity to explore these issues within a therapeutic framework.

5.2.2 Research. One of the main findings of this review was that the majority of the qualitative papers investigating experiences after surgery were poor in quality due to some methodological issues and some of the key components of qualitative research methods being neglected (e.g. reflexivity and statement regarding epistemology). However, matters such as reflexivity are often very personal, and the difficulties in including accounts of reflexivity in published papers, is acknowledged. Nevertheless, more qualitative research with the bariatric surgery population is required in order to address some of the methodological weaknesses and strengthen the findings evident within the existing literature.

Furthermore, the literature available provided very little in terms of how participants coped in the longer-term period after surgery, particularly past the three year mark. The experiences of patients during the first year of surgery may well differ to those who have been living with surgery for three or more years. Therefore more research exploring patient's experiences in the longer term would make a valuable contribution to evidence base.

Given that the Ogden et al. (2006) paper was found to be better in terms of quality than the others included in the review, this suggested that the themes supported by this paper, particularly the paradox of control and the impact of surgery on eating, would be the most appropriate areas to investigate further.

5.3 Limitations of the Review

Several of the studies contained samples of people who had undergone different weight loss procedures. Given that different procedures enable a person to lose weight through different mechanisms, some being more restrictive than others, it is thought to be inappropriate to have a mixed sample of participants. This is because the impact of more restrictive surgery, for example gastric bypass surgery, may differ to that of less restrictive procedures, like the gastric band, which are regularly monitored and often require further surgery.

Another issue relates to the different perspectives surrounding the term "outcome". Those with a medical background appeared to be more focussed on reduction in weight and comorbidities. Whereas, those with a psychological approach seemed to consider the psychosocial elements that were entwined with those of the physical. Therefore, the predetermined concept of "outcome", as influenced by a researcher's clinical background and knowledge of existing theoretical constructs, may bias the qualitative explorations of life after bariatric surgery. Give the lack of reflexivity within the reviewed papers issues related to bias were not explicitly addressed.

Furthermore, the studies included in the review were conducted in many different countries and therefore, cultural differences were evident within the sample. Potential issues here may relate to the impact of different healthcare systems and attitudes towards obesity evident within different societies. Another issue relates to the sample consisting predominantly of Caucasian patients and therefore little is known about patients who belong to ethnic minorities. Both of these issues raise questions with regards to the generalisability of the findings.

A final issue with the sample relates to the fact that males are underrepresented. Again caution is required, as this may suggest that the findings are heavily biased towards female experiences. This is particularly important when taking into account issues such as body image where research has suggested that body dissatisfaction is more closely linked to psychological wellbeing in women than men (Murnen, 2011).

5.4 Evidence of Reflexivity

The author of the review acknowledged the impact of their own bias on the process, but sought objectivity wherever possible using a reflective journal and discussions in supervision. An example of the author's reflexivity involved being aware of their own beliefs about weight loss and the impact of personal experiences related to the area. Furthermore, at the time of writing this, the author had already undergone a six month analysis of interview transcripts with people who had gone through GBS. Through being mindful of the potential for the author's familiarity with issues relevant to bariatric surgery to bias the findings, the author was able to discuss them in supervision which ensured that the synthesis was grounded in the data and not imposed upon by the author's existing knowledge and experience.

5.5 Conclusion

The aim of this review was to explore the qualitative literature that investigated the experiences of patients who had undergone bariatric surgery. Twelve papers were included, but caution was required when interpreting the findings as eleven of them were deemed weak in quality. The key findings indicated that patients described going through a process of transformation after surgery which was accompanied by a range of physical and psychosocial changes, and several areas in which patients had to adjust and cope. Finally, the review found that patients experienced paradoxical feelings

towards their bodies and in terms of self-control after surgery. Clinically, the review raised the issue that a number of patients were found to have unmet needs following surgery, particularly relating to eating behaviour and coping with emotions. More research is necessary to explore the emerging themes, particularly those supported by the Ogden et al. (2006) paper, along with experiences in longer-term and those more specific to the different surgical procedures.

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*Please note: The reference format for the journal "Obesity Surgery" does not adhere to the guidelines of the American Psychological Association (APA). However, in accordance with the course guidelines, the APA referencing style has been followed for the purposes of this write up.

Section C

Long-term Consequences of Gastric Bypass Surgery: A Qualitative Exploration of Patients' Eating Patterns and Behaviours

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by

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Long-term Consequences of Gastric Bypass Surgery: A Qualitative Exploration of Patients' Eating Patterns and Behaviours

1. Research Report Abstract

The number of individuals in England seeking surgery for weight loss has increased in the past decade, with the Gastric Bypass Surgery (GBS) being one of the most popular operations. After GBS, individuals are advised to adhere to strict dietary regimes in order to optimise and maintain their weight loss, and addressing their eating patterns is a vital part of the process.

The aims of this research were to explore the long-term impact of GBS on patients' relationship with food and to investigate how GBS patients coped in the years that followed.

The study adopted the qualitative methodology of Grounded Theory and utilised an iterative process of concurrent data collection and analysis. The sample consisted of 17 participants (15 females, 2 men) who had undergone GBS. The mean time elapsed since surgery was 55 months and ranged from 36 to 96 months. Each participant was interviewed using a semi-structured schedule and the transcripts were coded for categories which were integrated into a theoretical model.

A core category titled "The Battle for Control" emerged from the data and was found to be a prominent feature of the participants' accounts pre- and post-surgery. The theoretical model proposed a number of factors that contributed to the development of self-control after surgery, such as working through issues with food and learning about surgery. It also highlighted that factors such as self-soothing with food and feeling addicted to food, hindered the process of developing control. Issues related body image and shame were also prominent.

The key findings were considered in relation to the concepts of self-efficacy and locus of control, as well as psychodynamic theory. Recommendations included that more psychological support should be available after GBS, and that further research into food addition would be beneficial.

2. Introduction

2.1 Background

2.1.1 Obesity rates in England. In England the rates of obesity are just as concerning as those in other areas of the world. In 2008 the Health Survey for England (HSE), carried out by the Department of Health (DOH, 2008), found that approximately 61% of English adults were classed as overweight or obese. The HSE predicted that by 2015 over a third of men, and almost three in ten women, aged 21 to 60 would be obese. Further predictions reported that, if left alone, by 2050 obesity would cost the tax payer 50 billion pounds (DOH, 2008).

2.1.2 Bariatric surgery. Bariatric surgery is the treatment of choice for individuals who are morbidly obese and have exhausted all other weight loss avenues (NICE, 2006). Over the past decade the amount of people seeking surgery for weight loss in England has increased. In particular, the number of bariatric surgery procedures implemented between 2009 and 2010 was 30 times greater than between 2000 and 2001 (NHS Information Centre, 2012). Interestingly, the East Midlands had the highest rate of bariatric surgical procedures in 2011. These figures suggest that surgery for weight loss has become more widely accepted as an appropriate intervention.

2.1.3 Eating patterns and surgery. An aim of bariatric surgery is to increase the patient's experience of fullness after ingesting very small amounts of food substances. Due to a dramatic reduction in food consumption, the patient must adhere to dietary instructions ensuring that adequate nutritional requirements are met (Toussi, Fujioka & Coleman, 2009). Hence, in undergoing bariatric surgery an individual is placed in a situation where addressing their eating is an important element of the process and vital in optimising post surgery outcomes related to weight loss.

Prior to surgery many bariatric surgery patients are likely to have disordered eating patterns to some degree. However, much of the literature has focussed on eating pathology that a diagnostic label can be affixed to, particularly Binge-Eating Disorder (BED) (Kofman et al., 2010; Sallet et al., 2007).

As with much of the literature exploring the outcomes for bariatric surgery there appears to be a lack a consensus amongst researchers about the impact of pre-morbid eating patterns on outcomes. A systematic review conducted by Niego, Kofman, Weiss & Gelibter (2007) concluded that pre-surgery binge-eating was related to poorer outcomes, and that patients still exhibited those tendencies after surgery. However, more recently Livhits et al. (2012) highlighted mixed results, with 13 studies finding no association between BED and outcomes.

One study focussed on Night Eating Syndrome (NES; Morrow et al. 2008) but found failed to show that it had an effect on outcomes. Another study suggested that pre-surgery behaviours such as laxative abuse and vomiting, often thought to be poor prognostic factors, were actually linked to greater weight loss in the first six months after surgery (Chen et al. 2009). Whilst another study suggested that preoperative cognitive restraint was linked to postoperative dietary adherence (Sarwer et al., 2008).

The studies summarised here do not provide an exhaustive description of the literature available on pre-existing eating patterns and bariatric surgery. However, they demonstrate the high degree of variability within the quantitative literature and that the range of issues explored cannot fully explain the impact of surgery on eating. Many used standardised assessments and differed in follow-up times, as well as, the types of bariatric surgical procedures used and how they monitored outcomes. Also patients own perceptions of outcomes seemed to have been ignored within this body of literature.

Qualitative research may provide more detailed insights into patients' experiences of eating after surgery. Bocchieri et al. (2002) found that establishing new eating behaviour after surgery created a tension that had to be successful negotiated in order to optimise physical and psychosocial outcomes. Furthermore, Ogden et al. (2006) found that the control and limitations imposed by surgery sometimes led to a renewed sense of control within some patients. Two studies found that eating-related issues were often part of patients' explanations for unsuccessful weight loss, and highlighted that after surgery some patients had unmet needs related to eating problems (Zijlstra et al. 2009; Ogden et al. 2011).

Within the qualitative literature there appeared to be a lack of studies with samples containing an average of time since surgery beyond the three year marker. The quantitative literature has shown that, in the first few years after surgery, weight loss occurs at a rapid rate for the majority of patients. However, this slows down after around two years. Therefore, it is appropriate to speculate that the experiences of patients in the first few years of surgery are likely to differ to those whose weight loss is coming to an end.

Another issue evident was that some studies did not differentiate between the different surgical procedures. Given that Gastric Bypass Surgery is associated with greater risk of nutritional deficits due to its malabsorptive element, more pressure is put upon patients to adhere to strict diets, more so than with a gastric banding procedure (Socklingam et al. 2011). Furthermore, Kalarchian et al. (2010) noted that studies reporting findings from samples containing mixed surgical procedures may lack clinical meaning.

2.3 The Current Study in Context

2.3.1 Qualitative research. As previously stated, the majority of the studies on bariatric surgery are quantitative in nature. Despite such research enabling the statistical measurement of outcomes and predictors, it cannot provide an account of the patients' own experiences of adjusting to the changes in the longer term. A qualitative approach takes a different perspective and is able to extract meaning from an individual's point of view. This perspective is integrative in nature as it also takes into account the context within which an individual is placed. The current study intended to build upon the existing literature by exploring eating habits and behaviours in the years that followed surgery.

2.3.2 Aims of the current study. The study aimed to address the following three questions: What impact did GBS have on patients' relationship with food? What impact did these experiences with eating have on the long-term maintenance of weight loss and psychosocial outcomes? How did GBS patients cope with the long-term consequences of surgery?

3. Method

3.1 Design

The study adopted the qualitative approach of Grounded Theory due to the lack of information related to the research questions and the focus on patients' accounts. An additional aim was to generate a theory with explanatory power that would be useful for clinicians working with GBS patients. Grounded Theory focuses on developing conceptual frameworks through an inductive analysis identifying categories that are 'grounded' in the data (Charmaz, 2006). This process incorporates a number of techniques which will be discussed.

3.2 Participants

3.2.1 Inclusion/exclusion criteria. The aim of the research was to explore the experiences of patients aged 18 to 65 who had undergone GBS three or more years ago. Patients who had other bariatric procedures (e.g. a gastric band) were excluded. The focus purely on GBS was due to critique of previous studies for inappropriately containing samples of mixed procedures. But also because of advice from the bariatric team who said that GBS was considered the "Gold Standard" in bariatric surgery and that it requires less subsequent surgical intervention than other procedures.

3.2.2 The sample. The sample consisted of 17 participants (15 females and 2 males) with a mean age of 49 years (range 34 – 63 years), each of whom were given a pseudonym (see Table 3). The mean time elapsed since surgery was 55 months (range 36 - 96 months). The participants also provided information regarding their weight pre- and post-surgery. Figure 2 shows the degree of weight loss for each participant and demonstrates that 12 participants maintained their weight loss since surgery, whilst five reported regaining weight.

3.3 Procedure

3.3.1 Recruitment. Participants were recruited within one surgical department that routinely carried out GBS. The process was facilitated by the lead surgeon who sent an invitation letter and participant information sheet to all who met the inclusion criteria (see Appendix G for all research tools). A total of 98 patients were invited to take part. Twenty-six potential participants sent back a reply slip expressing an interest in doing so. Seventeen patients agreed to participate in an interview, with the remaining nine failing to respond to follow-up letters/emails.

Table 3: The Participants Demographic Details and Weight Estimates

Pseudonym	Gender	Age	Ethnicity*	Marital Status**	Time since surgery (in months)	Weight Prior to Surgery*** (St/lbs)	Lowest weight post surgery*** (Stone/Pounds)	Weight at Time of Interview*** (Stone/Pounds)
Caroline	F	54	WB	M	48	28st	16 St	16st 7lbs
Patricia	F	48	WB	D	96	36st	16st	16st
Hillary	F	53	WB	D	38	24st 10lbs	12st 3lbs	12st 3 lbs
Steven	M	45	WB	M	46	25st 4lbs	13st	13st
Wendy	F	33	WB	M	42	28st	13st	13st
Peter	M	46	WB	S	48	25st	14st	18st
Carla	F	48	WB	D	82	24st 7lbs	18st 7lbs	18st 7lbs
Cheryl	F	60	WB	M	50	24st 7lbs	14st 7lbs	14st 7lbs
Tina	F	43	WB	WP	59	29st 3lbs	17st 7lbs	21st 2lbs
Farah	F	51	AB	M	36	25st	11st 7lbs	11st 7lbs
Stephanie	F	54	WB	M	60	20st	12st	13st
Hazel	F	46	WB	S	51	30st	14st	14st
Ingrid	F	58	WB	W, D, S	39	24st 4lbs	11st 12lbs	11st 12lbs
Sandra	F	63	WB	W	84	25st 5lbs	11st 5lbs	11st 5lbs
Brenda	F	39	WB	CH	48	21st 4lbs	12st	12st
Tracey	F	47	BB	S	60	27st 9lbs	17st 9lbs	17st 9lbs
Melanie	F	39	BACW	CH	42	22st 10lbs	13st	13st 10lbs

*****WB = White British; AB = Asian British; BB = Black British; BACW = Black Afro-Caribbean and White (Please note: These are the terms used by the participants themselves). ******M = Married; D = Divorced; S = Separated; WP = With partner; S = Single; CH = Cohabiting (Please note: As with the terms above, these were those used by the participants themselves). *******Weights are participants own approximations given at the time of interview.

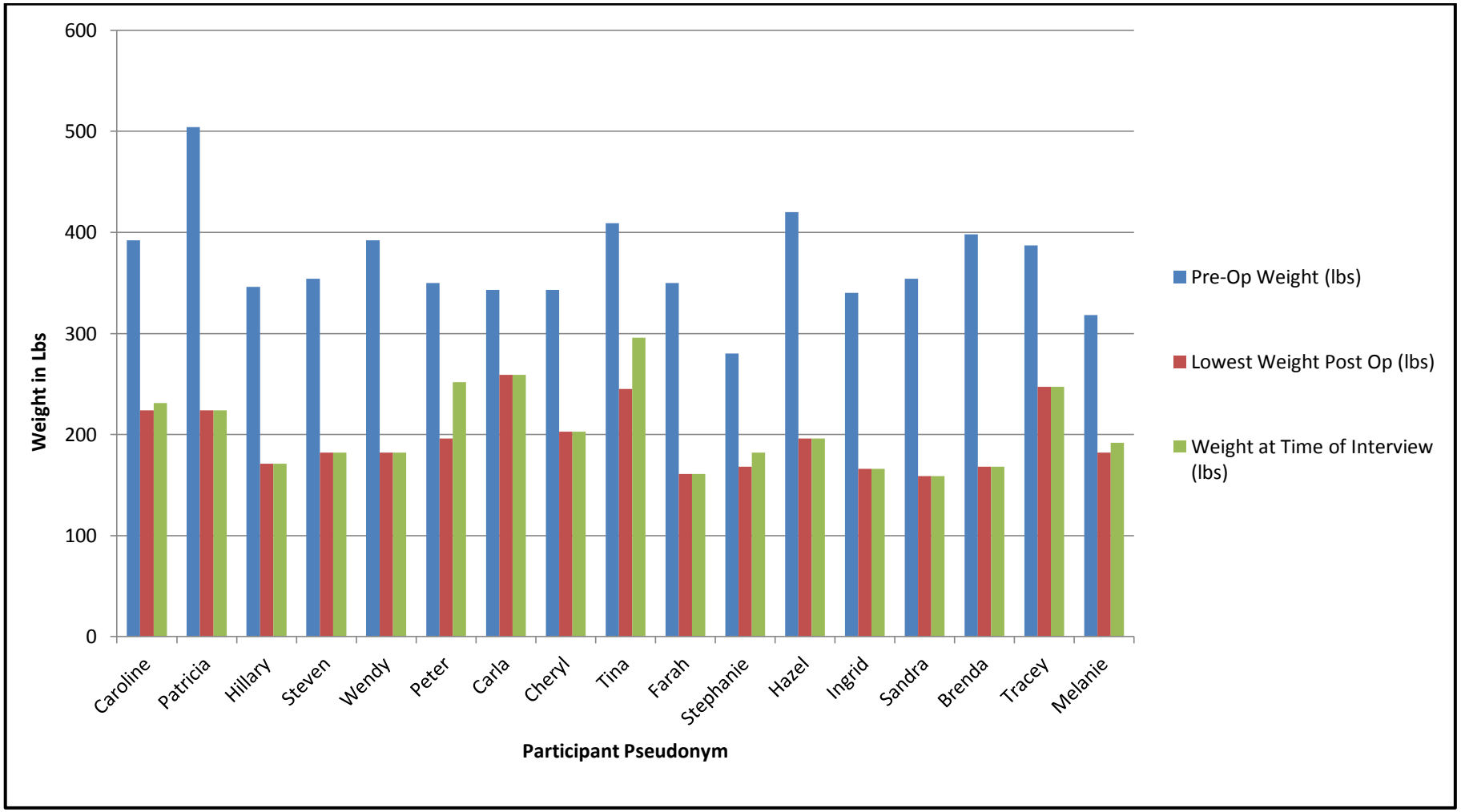

Figure 2: A Bar Chart Demonstrating the Participants Pre and Post Surgery Weight Estimates

3.3.2 Data collection. The study used an iterative process of data collection and analysis meaning that the two occurred concurrently and were driven by the "Constant Comparative Method" that will be discussed shortly. The data was collected using a semi-structured interview schedule which eased participants into the interview by asking them to begin by explaining the factors that led to them having GBS. The schedule then listed a number of questions and prompts aimed to explore pre- and post-surgical experiences related to eating and adjustment. In line with grounded theory, the interview schedule was altered as the interviews progressed in order to further explore emerging categories. All interviews were recorded using a digital recorder.

Participants were able to choose the interview location. Eleven interviews took place in the participants' home, with six taking place in a hospital environment. The length of the interviews ranged from 32 minutes to 73 minutes (mean of 55 minutes). Written consent was obtained prior to commencing each interview and issues relating to confidentiality and data storage were discussed before commencing. All confidential paperwork was kept in a locked filling cabinet, with electronic information stored on a password protected computer.

3.3.3 Transcribing. The lead researcher transcribed the interviews word for word. This facilitated the iterative process and ensured that they were immersed in the data, as is recommended when using grounded theory (Charmaz, 2006). Because the transcripts were analysed purely for content and meaning within the written text a "denaturalist" approach was taken and therefore the distinctive elements of speech, such as hesitancies and pauses were not transcribed (Oliver, Serovich & Mason, 2005), neither were the encouraging sounds made by the researcher, such as "mmm".

3.3.4 Data analysis.

3.3.4.1 Coding. The data analysis involved several stages of a coding process (see Appendix H for examples). Initially each transcript was analysed line-by-line (Tweed & Charmaz, 2011) for "incidents" such as "recurrent actions, characteristics, experiences, phrases or explanations" (Birks & Mills, 2011, pp 93). The next stage of analysis involved assigning codes to the underlying concepts behind the incidents identified. At this point the lead researcher began to assign names to these codes, which later became categories. Charmaz (2006) suggested that "gerunds" (words ending in "ing") should be used when naming categories to help ensure that the coding process remains focused on the participants' experiences. Therefore, where appropriate, categories were initially labelled in this way. The final stage of analysis was that of axial coding which involved analysing the relationships between the generated categories and the properties within them. This often resulted in categories being combined and emerging from this process was a core category which encapsulated a phenomenon that linked many of the other categories.

3.3.4.2 Constant comparison analysis. Constant comparison in grounded theory refers to the process by which the researcher continually compares the data, categories and concepts within and across all others. The study incorporated constant comparison into the iterative process. In practical terms, this was facilitated through the use of cue cards which kept an audit trail of the analytical technique.

3.3.4.3 Theoretical saturation. Theoretical saturation is defined as the point at which further data collection reveals no new information. This was monitored throughout and the subtleties involved were rigorously attended following guidelines outlined by Glaser (2001) who stated that "saturation is not the seeing the same pattern

over and over again. It is the conceptualisation of comparisons of these incidents which yield different properties of the pattern, until no new patterns emerge" (pp.191).

An audit trail noting emerging categories and properties examined the saturation progress, with saturation achieved during the fifteenth interview (see appendix I for an overview of this). Despite this, it is acknowledged that the concept of theoretical saturation is highly dependent on a number of different factors, including the ability to sample theoretically. Therefore, the claims of saturation are made tentatively.

3.3.4.4 Theoretical sampling. Theoretical sampling involves the researcher choosing particular lines of enquiry to develop emerging categories or theory (Charmaz, 2006). This can entail the researcher seeking out participants due to their specific qualities, and when utilised to its full, the researcher may find themselves covering substantive areas. Within the current study, theoretical sampling was utilised in the initial phases based on gender, age, ethnicity and time elapsed since surgery. However, due to the practical issues and constraints of theoretical sampling in an NHS environment relating to confidentiality, further theoretical sampling was unfeasible. In practice, all available participants were interviewed.

3.3.4.5 Memo writing. A critical component of grounded theory is that of memo-writing. Memo-writing is an intermediate step between data collection and presenting the findings. Memos containing the lead researcher's ideas about emerging codes and categories were kept throughout the course of the research which facilitated the analysis and theoretical integration. Memos were kept in several different formats including word documents, diagrams, cue cards and within a note book that the lead researcher had close by if moments of insight occurred (see appendix J for some examples).

3.3.4.6 Theory generation. This was the final process of the analysis during which the categories, and the relationships between them, were integrated into a theoretical framework. The aim of this was to go beyond a purely descriptive account of the findings in the hope that the model would have some explanatory power.

3.4 Methods to Enhance Quality

3.4.1 Position of the researcher. The lead researcher's epistemological position was that of a contextual constructivist viewpoint (see Appendix K). This means that the lead researcher held a belief that social realities are created through individual and collective action. The work of Charmaz (2000; 2006) on constructivist grounded theory emphasised the imperative role of the researcher on the research process, and the importance of ensuring that the analysis and construction of theory are grounded in the data. This approach resonated with the beliefs and epistemological position of the lead researcher, and therefore, was adopted primarily over other grounded theory methods that were influenced by positivist approaches, such as Glaser & Strauss (1967).

3.4.2 Reflexivity & theoretical sensitivity. Theoretical sensitivity reflects the level of insight the lead researcher has into their own internal world and their ability to consider the impact of this, along with their academic background, on the research process. The more a researcher becomes immersed in the data, the greater their theoretical sensitivity becomes. This is an important part of the research process and the lead researcher kept a reflective journal to monitor and enhance theoretical sensitivity, which was also discussed in supervision.

3.5 Ethical Issues & Approval

The study achieved ethical approval from March 2011 (see appendix L). It was granted access to NHS participants through one specific trust in June 2011 after the lead

researcher had completed the necessary training requirements (see appendix M). A chronology of the research progress can be found in Appendix N. The study raised several ethical issues relating to informed consent, confidentiality and data storage which were discussed with participants prior to the interview. The limits of confidentiality were made clear and all participants provided their GP details in the unlikely circumstance that they disclosed any information that put themselves or others at risk of harm. At the same time, they were reminded that they were in control of the process and of the information that they shared. An additional ethical issue related to the potential for the interview to bring to light distressing topics. Again, this was discussed prior to commencing and was responded to sensitively when it occurred.

4. Results

This section will now present the findings of the analysis of the seventeen interview transcripts. A visual overview of the developed theoretical model is presented in Figure 3 and a description of each category will now be briefly summarised. Quotations (*italicised*) have been used to provide evidence of the presented categories, as well as, to enrich the narrative.

4.1 The Core Category: The Battle for Control

A core category emerged and was titled "The Battle for Control". Control permeated all areas of the participants' accounts and appeared to play an important role in understanding eating patterns pre- and post-surgery. The "Battle" element was added to the title because participants' accounts reflected an ongoing struggle in gaining and maintaining control.

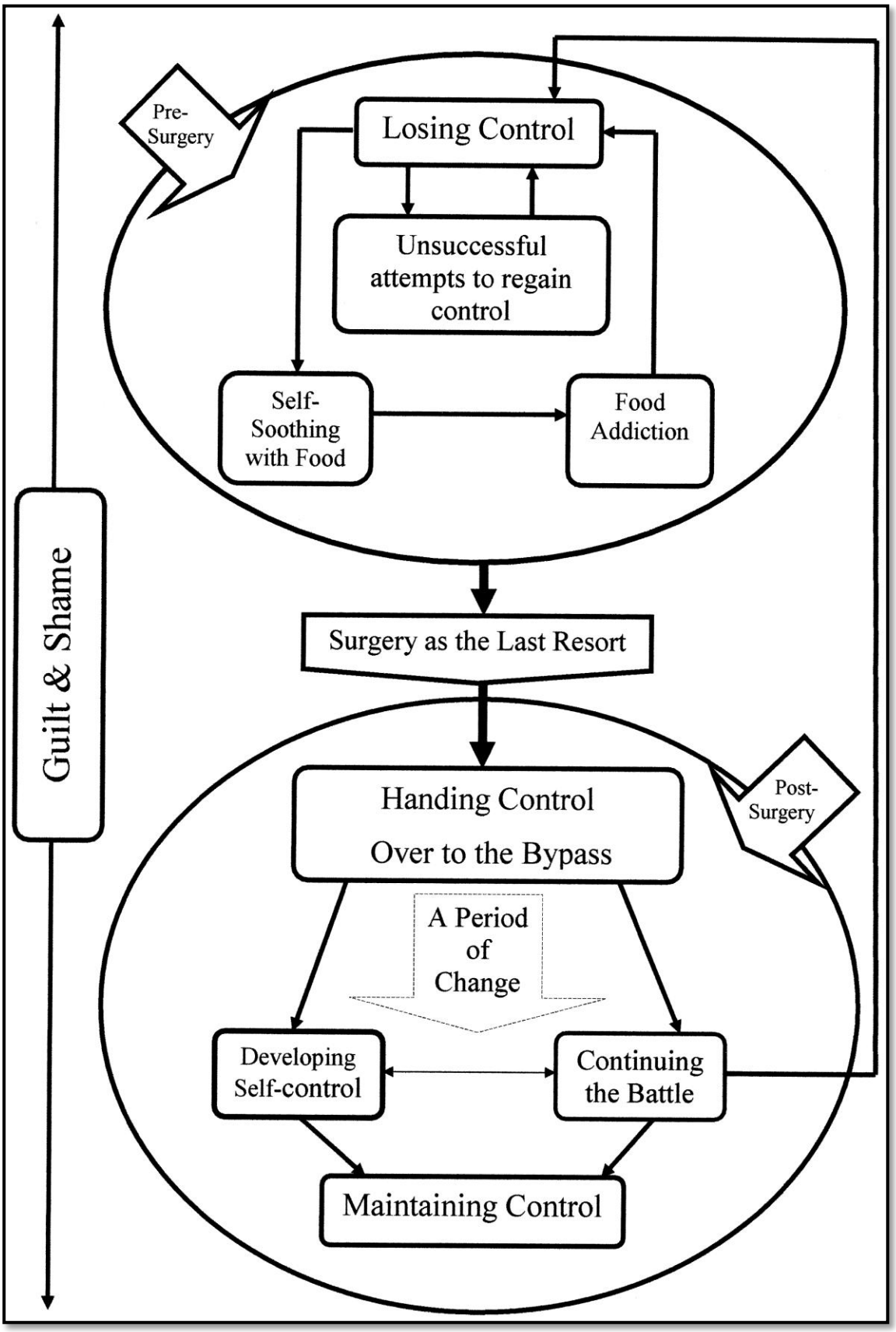

Figure 3: The Battle for Control in the Lives of Gastric Bypass Patients

4.2 Pre GBS

4.2.1 Losing control.

"All of my life I've struggled with my weight. But [it] just seemed to spiral out of control. I had no control" – Hazel (Aged 46)

Prior to surgery all participants described losing control over their weight and other aspects of their lives including their emotional states, physical health and eating patterns. Many participants described feeling very restricted by their weight and size, and spoke of facing death.

"My weight was 28 stone and my BMI was 57. I suffered as a teenager with weight problems but it was just getting out of control then. [I'd] been on diets since I was a teenager and my health wasn't that good. My knees were giving way and I was advised that probably in 10 years, I'd either be dead or in a wheelchair" – Caroline (Aged 54)

4.2.2 Unsuccessful attempts to regain control. All participants described feeling like they had tried everything to gain control over their weight, but that their attempts were ultimately unsuccessful.

"I was a serial dieter. For every pound I'd lose, or for every stone that [I] lost, [I] put one on and one more, which is so disheartening. It's absolutely the most disheartening thing in the world" – Melanie (Aged 39)

Many said that they had tried a number of different dietary regimes, such as "Weight Watchers" or "Slimming World". Some described experiences of using medication and one lady spoke of having her teeth wired to lose weight. They used

terms like “yo-yo” to describe the cyclical nature of their weight loss and subsequent gain.

“I’d tried everything. The normal dietary routes. There had been times when I’d lost 6 stone in the past and put it [back] on. It was just a yo-yo situation, you know. Nothing I could do could control it”. – Steven (Aged 45)

4.2.3 Self-soothing with food.

“Really and truthfully it was just me putting food in my mouth and if I was depressed then food was my comforter. The pantry was always my comforter” – Caroline (Aged 54)

All participants described trying to gain control over their emotions through their use of food and spoke of comfort eating when feeling depressed, angry, stressed, guilty or bored.

“I could not control my weight. I’m not stupid. I have a good idea of nutrition. But my eating wasn’t anything to do with putting food in my mouth. I later found I was trying to cover over a big black pit of anger”. – Cheryl (Aged 60)

The food that many participants used to self-sooth was that which they considered “unhealthy”, “bad”, “sugary” or “high in fat”.

“Chocolate, I suppose really I would say it’s my crutch. It makes me feel better....So, big bars of chocolate were it for me. But chocolate, all the nice things that are bad for you, were what I resorted to when life was bad and life was bad for a while” – Hazel (Aged 46)

Many described eating large quantities, often in secret, with four using the term “binge”.

I did a lot of eating in private....so in public I wouldn't eat particularly. But in private I'd eat lots, in binges and inappropriately. You know, just junk food – Peter (Aged 46)

4.2.4 Feeling addicted to food

"People don't understand addiction with food and I still don't think they realise now. I've never smoked, I've never drank. Food was my crutch, and unfortunately for me it's the one thing that you do need to survive. You need to eat and if that is your go-to mechanism because you don't like the way you feel about yourself, you don't like the snide comments, then you do seek comfort in food" – Steven (Aged 45)

Many participants said that they were addicted to food and that this meant that they were no longer in control of their eating. They described cravings, which many likened to those of other addictions, such as nicotine and alcohol.

"It was like, as if you were, addicted to drugs or something. It would be the same craving for something just to eat. I imagine that's what it would be like. Like a fix. Something to eat all the time". –Tina (Aged 43)

4.2.5 Guilt and shame. Many participants described how the comfort they gained from food was short lived and that feelings of shame often followed. Many also said that these feelings of shame were worsened by feeling judged, discriminated and stigmatised by others, particularly members of the public. Also, many participants described not feeling accepted by society and hoped that surgery would make them "normal".

"Because I was so big I felt like I wasn't accepted by society....I'd say I'd go out with friends and then because I just felt I looked awful, I'd ring at the last

minute and say I'm not going and I'd order a take away or make myself something to eat. Because, for that time, it made me feel better, then after I'd done it I just felt hideous....So it was like a vicious circle, because I was so big I didn't want to go, and then if I didn't go out I'd stay in and eat. So, I found myself getting bigger and bigger". – Tina (Aged 43)

4.3 Surgery as the Last Resort

"My life was getting darker and darker. It was like being in a well and there was no light". – Farah (Aged 51)

For all participants surgery was the last resort. They had reached a point in their lives where they were facing death, experiencing severe physical health problems and feeling depressed. Many described needing to take drastic measures in order to gain control over their weight.

"I think I was pretty desperate actually. That's the feeling I was having, and I saw this as a last resort". – Peter (Aged 46)

4.4 Post GBS

4.4.1 Handing control over to the bypass. In drastic attempts to regain control over their weight, all participants made the decision to have GBS. This decision marked a change in the battle for control, in the sense that the participants handed it over to the bypass. In the early stages, participants described the impact of this, in terms of feeling very physically restricted and only being able to manage a few sips of liquid a day.

"Well, you couldn't eat anything. It was just fluids. It was fluids and it was only so much fluids you can take" – Farah (Aged 51)

They said that after a few weeks they moved on to meal replacement drinks and "sloppy" food. Some described how this stage was easy for them. However, others spoke of their disgust for the milky drinks, and of their craving to chew something solid.

> *"I hated the milky drinks....I just didn't enjoy that at all. I couldn't wait to have something solid in my mouth". – Caroline (Aged 54)*

Following this, all participants described the process of moving onto solid food and spoke of how the bypass induced physical side-effects, particularly vomiting. This process will be discussed later on.

4.4.2 A period of change. All participants described many changes after surgery. They used phrases such as the "new me" and "being reborn" to describe how they made sense of these.

> *"I was so excited that I'd been able to have this surgery and I was looking forward to the rest of [my] life. [It] was just like being reborn". – Sandra (Aged 63)*

4.4.2.1 Experiencing weight loss. All participants described losing large amounts of weight very quickly.

> *"Well I was 25 stone four at my heaviest, and I guess I was just under 25 stone when I had my operation. I lost in that first year, virtually 12 stone". – Steven (Aged 45)*

4.4.2.2 Physical health changes. Many spoke of the physical changes that occurred. Four said that they were no longer diabetic.

"My diabetes went over night. The doctor said I would have been on the insulin. I was taking Metformin, but since then, I've not taken Metformin in my life. My diabetes [and] my bloods were fine." – Steven (Aged 45)

Others described increased mobility and energy levels.

"I can actually go out, walk around for 2 to 3 hours without even feeling tired. You know, I can do that. I feel happy. I can get to places quicker than before". – Farah (Aged 51)

Many spoke of temporary hair loss, changes to their taste buds, and of having to take vitamin B12 injections for the rest of their lives. All participants described how their weight loss had changed their skin. This appeared to be a significant issue for many participants and will be discussed in greater detail later.

Five described experiencing complications after surgery due wound infections and all of these participants said that they found the experience of being in hospital very traumatic.

"It was hell. I caught MRSA after my gastric bypass and I was really, really poorly with it. I was taken back into hospital a couple of times because I just wasn't able to, erm, not that I wasn't able, I didn't want to drink, and I didn't want to eat" – Wendy (Aged 33)

4.4.2.3 Mood changes. The participants described a number of mood changes that occurred after surgery. Many described feeling ecstatic and "on a high" when they started noticing their weight loss.

"I really didn't think it would work because nothing ever works. You know...and you know when I saw the weight coming off... Well, I can't begin to tell you. If

that's what it feels like when you take drugs I can understand why people are addicted to drugs because you get high on the feeling. You get high....because of the weight loss". – Hillary (Aged 53)

Some felt that having surgery had alleviated their depression.

"I've become a happier person. Definitely" – Steven (Aged 45)

However, this was not for all participants, with five describing how surgery had made them feel worse than before.

"I'm more tearful now than I ever was before. Erm, I don't know whether it's because.... I can't explain it. I'm sorry. I can't explain how I feel. It's very hard to explain". – Caroline (Aged 54)

Others said that they were not happy after surgery because it was not the answer they were looking for as it did not meet their expectations.

"Unrealistically I thought I was gonna wake up a size 10. Erm, I don't know why I thought that. I think I thought at the time it was a miracle cure". – Melanie (Aged 39)

4.4.2.4 Improved self-confidence. All participants described how surgery had increased their self-confidence and self-esteem.

"As you lose the weight you get more confident. You go out more. You buy more clothes. You know, you just feel really good about yourself" – Tracey (Aged 47)

However, five participants found that the improvements to their confidence were not maintained over the years, particularly for the participants who gained weight or who were distressed at having loose skin.

"Because the weight's been creeping back on I can feel my self-esteem going way down now, and some of my clothes, I won't wear them". – Tina (Aged 43)

4.4.2.5 Changing views about their bodies. The participants talked a lot about how surgery changed the way they viewed their bodies. Some said that they felt more attractive and that their body image had improved since surgery.

"I just feel that I look good. I don't have to keep telling myself. But I look in the mirror every day like we all do and, you know, you put a smaller pair of jeans on and you think 'wow'". – Sandra (Aged 63)

Buying clothes emerged as very important for the participants with many describing their delight at being able to buy clothes "off the peg" in the high street, as opposed to going to speciality shops

"All of a sudden I can wear Asda clothes. You know, three pound tops and I'm having them in every colour. It was just wonderful" – Hillary (Aged 53)

As previously stated, all participants said that their weight loss had left them with excess skin on their arms, legs, stomach and chest areas. Some described how this was uncomfortable and embarrassing. Many participants described feeling acceptable with clothes on, but the degree to which their loose skin was a problem, varied greatly. Nevertheless, the majority of participants said that they found it very distressing.

"My body is ugly. I mean if I stand in the mirror naked I'm like a festoon blind. Everything sags and sways with all [my] skin sagging and I think it's quite ugly and, I have thought to myself, in some respects it's just as ugly as being 30 stone" – Hazel (Aged 46)

"I spent two years under the promise that I was gonna have the loose skin taken away and there are still times now that I look at the skin and I sit and think to myself 'at least when I was big it didn't look like this'. You know, cause it's awful.....It's devastating. It's depressing. It's heartbreaking. It's embarrassing. Absolutely embarrassing". – Wendy (Aged 33)

A reoccurring narrative was one in which participants described feeling "cheated" or "unfinished" after surgery due to having excess skin. Many said that prior to the bypass they had been reassured that after losing weight they would be offered corrective surgery to remove all of their loose skin. However, many said that they were told that, since the financial crisis in the NHS, corrective surgery was limited.

"I'd lost 12 stone, but I had all this skin hanging off me and I assumed he was gonna say we'll do your tummy tuck now, get rid of this excess here and he didn't. He went no, we don't do that on the NHS no more. Off you go. I was absolutely gutted. My thoughts then were although I was big, I had full skin. My skin's very crepey now. I'm not complaining I've lost the weight at all. But erm, I've got very crepey skin. Everything's sagged and when I'm naked I look like I'm melting" – Tina (Aged 43)

The degree to which the participants had corrective surgery varied greatly as well, but many said that they had been given the opportunity to choose one area of their bodies to have their excess skin removed. Three of the participants described paying for additional procedures themselves, with one lady remortgaging her house to have all of her excess skin removed in stages. Only four of the participants felt that their loose skin was not a problem and that they had accepted it as part of themselves.

"There are times when I think I'd like to wear something sleeveless and I look at my bat wings and I think 'no I'll just cover it up'. It is there. They are there. They'll always be there. They're a part of me". – Farah (Aged 51)

4.4.2.6 Relationship changes. Many participants described experiencing changes in their relationships and/or friendships. Three participants told how their marriages ended after having surgery.

"[My marriage] wasn't particularly very good anyway and it changed very quickly since I had taken back the control over my life. He was a bit of a control freak and since I started taking control it went out of the pan quite quickly and I've been divorced for 7 years now". – Patricia (Aged 48)

Three spoke about finding new partners since surgery. One lady described how this had led to some fears of intimacy due to her feelings about her body.

"I met my partner about eight months ago now. We had some real issues with it because obviously you meet somebody, they find you attractive and then when I took my clothes off he was horrified because he'd never obviously been out with anybody before who'd lost a lot of weight. We had real issues at the beginning" – Tina (Aged 43)

Many people spoke of how surgery had affected their friendships with a reoccurring theme of losing old friends and finding new ones.

"I've lost a lot of things that I love from having the gastric bypass. You know, food being the first one and I also found that the more weight I lost the more friends I lost. I have none of my original friends. It's not because I behaved in any particular way. It's just seems that people just don't like to see a good thing

happen to you. You know, I became smaller than all my friends, whereas [before] I was a lot bigger. I was the safe fat friend that they all felt really great against" – Wendy (Aged 33)

4.4.3 Developing self-control. Many of the participants described how the restrictions imposed by the bypass had enabled them to develop control over their weight and eating. A number of factors were found to be involved in the development of this self-control.

4.4.3.1 Viewing bypass as an aid. Viewing the bypass as an "aid" or "tool" to work with appeared to contribute to the participants perceptions of being in control. Six participants described seeing the bypass in this way.

"[Surgery] is an aid. It's not a cure. As long as you use it as an aid, that's where it improves. It's true. All the problems, the thought patterns and things are still there and I can still hear them. But now I'm louder than they are and in control" – Patricia (Aged 48)

4.4.3.2 Learning about surgery. Feeling adequately informed about surgery was also found to be important in developing control. Eight of the participants described learning as much as possible about the gastric bypass and felt that this enabled them to cope with its impact.

"I had to be like a sponge. All the information I could get, I soaked it up. Because I thought that is so important, because if you haven't got it square in your head you can't go ahead with it because you can't cope after the surgery. I read everything". – Sandra (Aged 63)

Those who felt that they were less informed described having many unanswered questions and feeling let down because their expectations of surgery did not materialise.

> *"I got this vision in my head that I was gonna get these legs that I wanted and this bum I'm gonna have and I've not. Don't get me wrong, I'm not totally unhappy with it, but I'm not one hundred percent happy with it". – Melanie (Aged 39)*

4.4.3.3 Working through issues with food. Working through food issues emerged as a vital part of the process in adjusting to the surgery and in developing self-control. Nine participants said that surgery had enabled them to become more aware of their old eating patterns and that this facilitated the process of addressing them.

> *"I don't think you realise how much you overeat until you actually do the surgery and then it's learning to make the right choices and put the right food in. Obviously, I wished I'd have done more research into the fact that a lot of it was comfort eating. There [were] other issues for me being overweight." – Melanie (Aged 39)*

Five participants described a period of grieving during which they mourned the loss of food and some also described having to learn to throw food away.

> *"I do remember grieving. That was for about 12 months. I'd be, you know, quite sad at not being able to eat the massive portions. You know, if I was having something that I really enjoyed I'd sit there thinking 'I wish just once, once more that I could have a big, big old plate'. That's gone now. I don't have thoughts like that. But I did for about 12 months....and it really, really upset me if I couldn't finish something" – Wendy (Aged 33)*

The end result of this process was a new attitude towards food; one in which food was seen as having purely a survival function.

> *"Well, you're just kind of a bit like 'Robot style' because you know you've got to have your protein. The food is not that pleasure that it used to be. But you don't think to yourself 'Mmm, yeah, I fancy this'. You just eat to live, not live to eat". – Hillary (Aged 53)*

Many participants said that they no longer enjoyed food, whilst others spoke of being more grateful for food since surgery.

> *"I've completely changed my attitude to food. I'm more grateful for food now. Very grateful". – Wendy (Aged 33)*

A small number of participants had received psychological support to work through their issues with food. But the majority of the participants felt that they would have benefitted from more support, despite whether or not they received any.

> *"Before the surgery food was my best friend. Now it's kind of like a really bad boyfriend. You know they're really bad for you, but you can't help but going back there and you always feel really crap when you have". – Wendy (Aged 33)*

4.4.3.4 Learning to self monitor. Many participants described how they had to learn how to eat again when moving on to more solid food, and that this lead to a transformation of their eating patterns, which involved smaller portions, different food types and eating more regularly. Eight participants described how they felt in control of this process and that following the guidelines given to them by the dietician was helpful.

"I felt as if I was totally in control and I was. I decided what to eat. I knew exactly what I couldn't eat and I made that conscious decision to follow the guidelines". – Sandra (Aged 63)

Several described this phase as one involving "trial and error"

"I was more adventurous with meals as well. You know, I would introduce things that I'd never tried before. Erm, but it was, again it was just trial and error because I'd be able to eat something with one meal and not on another."– Brenda (Aged 39)

This phase also accompanied physical side-effects of vomiting and "dumping". Dumping can be explained as follows:

"Things with a high sugar content give you a sort of sugar rush which would then make me feel ill. I was told it was classed as "dumping". It's the way the body deals with the sugars" – Carla (Aged 48)

For many, these side-effects played an important role in testing the limits of the bypass and in allowing the participants to become aware of the type, and amount of food, that they could physically tolerate. Many described learning to be attuned to these symptoms and using them to monitor their food intake. Furthermore, it was in avoiding these unpleasant experiences that some said that their eating patterns changed dramatically.

"Well I think your body tells you really what you can eat and what you can't eat. Even today, you know, I can eat something and it really disagrees with me and I feel quite ill. Erm, and you just have to learn that it doesn't agree with you, don't eat it again". – Carla (Aged 48)

Many participants described becoming more aware of their internal states of hunger and satiety, and felt that they developed the ability to monitor these as a way of staying in control.

> *"I'd have a couple of bits of something and that was it. It would make me feel I was full. But if I had more then it would make me feel very unwell. So I didn't. The unwell feeling stopped me from eating anymore" –Hazel (Aged 46)*

Other spoke of being aware of the warning signs indicating that they would become unwell, and of using this as a tool.

> *"If I see the signs earlier I just don't move further with [anything]. It's a constant thing. A reminder. It's like having Jiminy Cricket on your shoulder....But I needed this Jiminy Cricket on my shoulder telling me 'Don't' because I knew I'd fail again. So it just keeps reminding me." – Patricia (Aged 48)*

Some went on to describe how, in the long-term, the side-effects diminished and that this led to some difficulties in continuing to monitor their internal states.

> *"Because I can eat sweets now, and erm, cake and biscuits, all the things that I liked before and I couldn't eat them initially, I know that I can eat them [and] it's still a danger for me. I can still slip. So, I really have to stay focussed. You know, whereas for a long time it was just so easy". – Hillary (Aged 53)*

As well as monitoring physical states, some participants described learning to monitor their psychological states, particularly their thought processes around eating. Some found that they were able to challenge themselves when wanting to eat in attempt

to self-sooth. This was particularly apparent for those who felt that they had worked through their issues with food.

> *"I talk to myself when I'm in the kitchen. I think 'I'm gonna eat that'. Then I'll say to myself 'Do I really need this. Do I really need to eat this? Are you really hungry? No. So, why am I eating it?'" – Melanie (Aged 39)*

4.4.3.5 Readdressing lifestyle balance. Six participants spoke about readdressing their lifestyles after surgery. This included increasing their exercise and activity levels, as well as giving up smoking and caffeine.

> *"I got into exercise and erm, I've never been into exercise. I used to skive school because I hated PE. I love walking and I've got a treadmill now. Erm, I love walking. I'd never realised how refreshing it is and how...you see so many things and you just feel so good. I love it". – Hillary (Aged 53)*

4.4.3.6 Engaging with support. Another aspect that enabled the participants to develop self-control was having access to support. Many spoke of positive experiences of seeing members of the bariatric team, and said that they felt that friends and family were also a huge support to them. Some also spoke of knowing others who had undergone bariatric surgery, and that they had turned to them for support.

> *"Well I was very lucky with a very good family and a good lady that supported me through and I've met friends through websites. But the main major help that I got was, without a doubt two people, one was the nurse and the other, the dietician. You know, I can't thank them enough. There was always somebody you could speak to" – Steven (Aged 45)*

Others spoke of attending a bariatric surgery support group and finding it useful. However, a number described some difficulties in attending this group, due to social anxiety, practical issues or simply not wanting to let others know that they had surgery. Some participants described how they did not feel that they had enough support after surgery and that they felt more after-care was required.

> *"I don't think there's any support at all really. I think it's just a matter of you have it done and that's it. Bye-bye" – Caroline (Aged 54)*

4.4.4 Continuing the battle for control. For some participants, developing self-control after surgery was difficult. Five described finding different ways of seeking control that mirrored those of the pre-surgery struggle. Furthermore, even those who felt they were in control still described elements of battling with it after surgery.

"I'm still trapped in that over-eating pattern because perhaps about a year after my surgery I started overeating again". – Tina (Aged 43)

4.4.4.1 Reverting back to similar eating patterns. A number of participants spoke of how in the years that followed surgery they found that they had reverted back to their old eating patterns. However, these patterns took on different forms due to the physical limitations imposed by the bypass.

> *"I kind of reverted back to a similar pattern of eating. It's different in the sense that I can't eat the same things and I can't have the same quantities. But, you can still eat crap and, you know the dietician summed it up quite well, she said 'You can't eat much, but you can still eat a Mars bar, and you could eat three Mars bars a night if you want to. You shouldn't that's not the point' and she's right you know. You can still eat crap and you can still eat quite a lot of crap*

you just need to take more time over it. Erm, and I do and that's still a problem". –Peter (Aged 46)

4.4.4.2 Still self-soothing with food.

I still comfort eat. I've really had dieting on my brains since I was 11 and I think it's just become such a major focus in your life. It's an argument almost all the time in your body and your mind. I don't stop thinking about food issues". – Carla (Aged 48)

Since having surgery a number of participants still felt that they used food as a way of self-soothing.

"I've been put on to Prozac now and it makes it worse because then I start to eat, you see. So I go into the pantry and I'll eat chocolate and I'll eat biscuits because that's the only thing that goes down now, the only thing that tastes nice to me, nothing else does". – Caroline (Aged 54)

Others felt that those tendencies were still there, but that working through their issues with food had enabled them to develop other ways of coping with painful emotions.

"Well, like I've said, when life gets more difficult now I exercise more or I do more things or, you know, I do go out. It's easier to cope with the everyday stresses of life when you've got the tools for the job and the body for the job. You can cope with it. It's very difficult to cope with everyday occurrences or major, major stress in your life when you, you know, you're clearly obese. Well morbidly obese. You just can't cope with anything because your mind's not in the right place". – Steven (Aged 45)

4.4.4.3 Cheating the bypass. Linked into reverting back to old eating patterns was the notion that some participants described finding ways to "cheat" the bypass. Examples included eating "sloppy" food at a slower rate and purposefully making themselves sick in order to empty their stomachs and continue eating.

> *"I was finding ways of cheating by eating sloppy food. I suppose I've got creative about eating bad things and found ways of doing it" – Peter (Aged 46)*

4.4.4.4 Still feeling addicted to food.

> *"I'm addicted to food, still am addicted to food. That [hasn't] changed. I am addicted. There is no other way around it. I would go and spend fifteen twenty pound in a supermarket on savoury stuff and eat the lot then hide the packing. It was a very secretive thing and [those] tendencies haven't gone away. That's still there to the point where I'm constantly having to think what I'm gonna be eating next". – Patricia (Aged 48)*

A large number of the participants still felt that they were addicted to food, and that even many years after surgery, they were still battling with it. This seemed to be regardless of how in control they felt after surgery and not dependent on whether or not they continued to use food to self-sooth.

> *"You put a bottle of vodka in front of an alcoholic and say 'You can have it, but you can only have one sip a day and that's it', you walk away and leave them. What's going to happen? They're gonna neck the bottle. We're exactly the same. I am still addicted to food. Constantly, that's all I think about all day. I count the hours til my next meal". – Wendy (Aged 33)*

4.4.4.5 Developing a new addiction.

"Because I could no longer eat, it was a particularly bad period; I found that alcohol had exactly the same effect". – Cheryl (Aged 60)

Six participants described how they developed new addictions after surgery. The "new" addictions included other substances that they could ingest, for example alcohol or coffee.

"I became addicted to coffee.... It's a good thing because then if I don't eat I drink coffee more than I eat. Definitely. So, to me that's a good thing because I don't eat crisps and chocolate. So the coffee's a good thing for me". – Tracey (Aged 47)

But also, many participants spoke of spending increased amounts of money after surgery, particularly on clothes.

"You know, it was like I substituted chocolate for clothes" – Hillary (Aged 53)

4.4.4.6 Developing compulsive behaviours. Two participants described developing behaviours after surgery which they felt were obsessive-compulsive in nature and attempts to seek control.

"Everything in the house has to be where I want it. You know, everything has to be cleaned to my standards and this is all since the surgery. It's very strange. I can't get my hands dirty. That's a big no-no, and this is all since the gastric bypass. I have to be in complete control." – Wendy (Aged 33)

4.4.5 Still experiencing guilt & shame. The participants' experiences of shame and stigma were found to change after surgery. However, this category was still very much prominent. Many of the participants described how they now felt more acceptable

because they appeared "thinner" to others and were less restricted by their size. However, a large number of participants spoke of only feeling acceptable with their clothes on and said that they were ashamed of their bodies underneath due to the loose skin.

> *"I mean the surgery was the best thing I ever did. But it's the lose skin that worries me. So, it's not a case of....I would never flaunt. You know, I just wouldn't walk around naked cause I think I just look disgusting. Erm, but clothed fine. But naked no. Definitely not" – Tracey (Aged 47)*

Therefore, for many participants the deep sense of shame they felt prior to surgery due to being overweight, seemed to transfer to the shame of having loose skin. Also, some of the participants described feelings of shame at having the operation and spoke of concerns that others would perceive it as "cheating" or the "easy way out". As a result, a number of participants said that they did not tell many people that they had undergone surgery and hoped that others would assume they had lost weight through will-power and self-control.

> *"Apart from my brother....I wouldn't dream of telling anyone. Because it's shameful. Because I'm embarrassed by it. That is the reason why. There is also a much less, erm, there's a much more selfish reason and that is, it felt good to lose all that weight and have people think I did it" – Peter (Aged 46)*

Three participants said that they felt ashamed and guilty because they had put weight back on and this had made them feel like a failure.

> *"Most of the time I'm fine. But then sometimes it makes me feel just not accepted and low [in] self-esteem and ugly and that I don't like myself [be]cause I'm not what I wanted to be and I'm disappointed. I just feel guilty*

about it because I almost feel like I had the chance to do it and I didn't and I failed". – Tina (Aged 43)

However, five participants did not talk about shame and felt that having surgery had made them feel more accepted by others.

"I'm more confident in myself and don't feel people are judging me on my size anymore". – Brenda (Aged 39)

4.5 Maintaining Control in the Longer Term

The degree to which the participants developed self-control or continued with the battle for control varied, and was therefore, seen as being on a continuum. Many participants described feeling the restriction of the bypass easing off after a few years. The control related factors described previously appeared to have played an important part in how they coped with this.

"I felt the restriction that I did have, all of a sudden disappeared. It's like somebody had pulled a plug and I could eat more. I thought I would always have the restriction there and you don't" – Brenda (Aged 39)

It appeared that those who viewed surgery as an aid, had developed alternative coping strategies, worked through their issues with food and had learnt to monitor their internal cues, spoke of feeling more able to control their weight in the years that followed.

"I now look at my body as a car and food really is the petrol that goes in there and I just think well that's all it is. It's not to be abused" – Steven (Aged 45)

As previously reported, some participants described repeating similar old eating patterns in the years that followed surgery, and as the restrictions eased off, they were

more able to do this. This was particularly described by the participants who had gained weight. There was also some evidence to suggest that, despite the level of control a participant perceived themselves to posses, the battle was not over, and that living with a bypass on a daily basis involved constant hyper-vigilance around food.

> *"If it was someone craving nicotine they'd go and have a cigarette. If it was a heroin addict, go and have heroin. It's an addiction. It's always gonna be there. I'm always gonna be falling off the wagon and getting back on. Simple as that. I can deal with it now because I know that's what it is" – Melanie (Aged 39)*

The developed model suggests that by encouraging a person to work on the self-control promoting factors they are more likely to shift towards that end of the continuum, and therefore, cope with the long-term implication of having GBS.

5. Discussion

The findings of the analysis of 17 interview transcripts with patients who had GBS generated a large number of categories. The core category was titled "The Battle for Control" and permeated many areas of the participants' accounts pre and post surgery. The issue of control was seen as important in understanding how the participants adjusted to surgery. It was also found to be linked to the maintenance of outcomes in the years that followed. This section will now link the current findings to existing literature and theory, whilst also describing the novel contributions made.

5.1 Role of Control in Eating

The finding that control played an important part in understanding the experiences of GBS patients is supported by others who have found that bariatric surgery can lead to a renewed sense of control for some patients despite the fact that it

imposes a number of physical restrictions to begin with (Ogden, 2006; Engstrom & Forsberg, 2011). The experience is not homogeneous, and other patients can experience the same intervention as taking control away from them (Colles et al, 2008; Saunders, 2004) and that, post-surgical loss of control over eating, was linked to difficulties in maintaining weight loss (White et al. 2010).

The current findings conceptualised control in a manner that suggested GBS patients have spent their lives battling for control. Amidst this battle, the bypass provided some of them the opportunity to develop self-control, whilst others struggled to. A further conceptual element to the model suggested that the degree to which a person developed self-control was on a continuum of two polar extremes (see Figure 4).

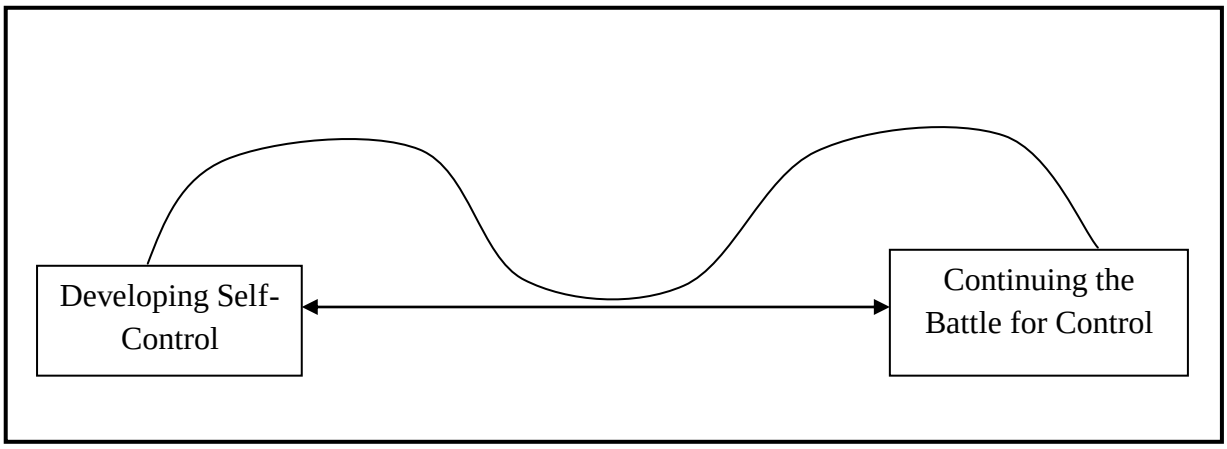

Figure 4: A theoretical demonstration of the continuum of control

Table 4 summarises the factors that were found to influence where a person was on the continuum, with many people clustering around one of the two ends. This model may help to explain the variability within the existing literature. Most quantitative research seeks to reduce findings to a mean and can sometimes incorrectly assume that the data will be evenly distributed. Within this qualitative study, the data suggested that

the participants' responses may not follow a normal distribution and may be more representative of a bipolar scale.

Table 4: Factors Associated with Developing Control after GBS.

Factors Associated with:	
Developing Self Control	**Continuing the Battle for Control**
Seeing surgery as an aid/tool	Reverting back to old eating patterns
Learning about surgery	Finding ways to cheat the bypass
Working through issues with food	Still self-soothing with food
Learning to self-monitor	Still feeling addicted to food
Readdressing life-style balance	Developing a new addiction
Engaging with Support	Developing compulsive behaviours

5.2 Locus of Control

The Locus of Control (Rotter, 1966; LOC) theory may shed some light on the current findings regarding control. LOC refers to the degree to which a person perceives they have control over life events and is measured on a scale ranging from internal to eternal. People with internal LOC locate the ability to control life events within themselves and are therefore more likely to own responsibility for their actions

and work towards goals. Those with an external locus of control attribute control to outside forces and are less likely to perceive that they possess the skills to control aspects of their lives.

As it stands, research is yet to explore this concept with bariatric surgery patients. Yet, there are many studies that have found a positive association between internal LOC and successful outcomes following weight loss programs (Nir & Neumann, 1995; Saltzer, 1982). For bariatric surgery patients, as the dramatic weight loss phase slows down, they are confronted by a situation that involves maintaining behavioural changes and taking responsibility for doing so. One hypothesis speculates that people with an internal LOC are more likely to engage in this, and as a consequence, develop self-control after surgery. This may explain the theorised bipolar distribution.

5.3 Self-efficacy

In developing this idea further it is helpful to mention a concept directly linked to LOC; that of self-efficacy. Self-efficacy is a central component to Bandura's (1997, 2005) social cognitive theory and can be seen as a person's confidence or belief in their ability to cope with life challenges. Bandura felt that someone with an external LOC may lack the confidence to cope with a life challenge.

Self-efficacy is a well established concept with much empirical support linking it to predictors of health behaviour in many areas, including weight management (Berman, 2005). Existing literature suggested that obese individuals prone to comfort or binge eating have lower eating self-efficacy than those who do not (Elfhad & Rossner, 2005). The only study exploring self-efficacy with bariatric surgery patients, found that dramatic weight loss after surgery, was positively associated with greater eating self-

efficacy. But, over time, self-efficacy diminished for a number of individuals who had gained weight (Batsis et al. 2009). In terms of the current study, the factors associated with developing self control could also be seen as those promoting self-efficacy, and may explain why some patients struggled in the longer term. Further research applying the concepts of eating self-efficacy and weight locus of control may provide more insight into factors that predict successful outcomes that are maintainable. This might lead to ways of screening patients to identify those who may need more behavioural support after surgery.

5.4 Psychodynamic Theory

Psychodynamic theory is also thought to have great potential in explaining some of the unconscious processes that may influence experiences after GBS. It is thought that the participants who viewed the bypass as a tool, to be "worked with", unconsciously perceived it as a transitional object which enabled them to slowly develop an internalised capacity for self-control (Winnicott, 1953). Those who struggled to develop this internalised capacity may have unconsciously viewed the bypass as "persecutory" and "controlling". Therefore, also as something that must be defeated or sabotaged (Casement, 1985). Scientifically this would be hard to explore and psychodynamic theory is not accessible to everyone. However, this explanation is felt to be a useful way to conceptualise some of the unconscious processes that may be at work after the bypass.

5.5 Addiction

5.5.1 Self-soothing linking food addiction. Prior to surgery all participants described using food as a way of self-soothing and regulating their emotional states. The majority felt that when denying their need to use food in this way, they experienced

cravings accompanied by levels of distress that led them to believe that they were addicted to food. Many also felt that having GBS did little to diminish their food addiction. Even the participants that were no longer using food to self-sooth after surgery described having to be hyper-vigilant around food due to a fear of giving in to their addictive tendencies. This is a novel finding that has been relatively unexplored within the area of bariatric surgery.

However, a growing body of literature, albeit medical in nature, has started to investigate the notion of "food addiction", which has in the past, been considered a myth. Findings so far have suggested that neurobiological processes activated during illicit drug use can also occur when eating, thus suggesting that physical addiction to food is possible (Blumenthal & Gold, 2010).

The psychological elements of food addiction have been less explored, despite phrases such as "chocoholic" frequently occurring in popular culture. Gearhardt et al. (2009) acknowledged the subjective bias of participants in classifying themselves as "food addicts" and developed the Yale Addiction Food Scale (YAFS) for identifying eating patterns that are similar to the behaviours evident in typical addictions. Meule and Kubler (In Press) used the YAFS to diagnose food addiction and found that participants with addictive eating patterns experienced more cravings, but interestingly did not expect positive reinforcement through eating. One hypothesis that links into the current findings is the idea that lack of positive reinforcement may relate to the guilt often experienced after eating in response to cravings.

There is also some evidence to suggest that emotional signs of withdrawal can occur when desired food types are no longer available (Parylack, Koob & Zorrilla, 2011). In the current study, many participants spoke of having to continually fight against these cravings after surgery. Another hypothesis speculates that GBS patients

may experience a period of withdrawal after surgery. It appears that our understanding of food addiction is only starting to develop and that this may be an important concept to explore further with bariatric surgery patients.

5.5.2 Addiction transfer. Another finding was that some participants felt that their addictive urges had been transferred onto something other than food (e.g. alcohol or shopping). There appears to be a lot of anecdotal information on the internet, and in lay press, regarding the concept of "addiction transfer", but the academic research is sparse. In an article published in the Bariatric Times, Moorehead & Alexander (2007) discussed addiction transfer and linked it to the idea that many obese patients cope with stress in a regressive manner, which involves self-medicating with food. The authors recommended preventative measures involving education and addressing the underlying psychological motivations to eat, to address this issue.

Indeed, published literature has suggested that addictive personality traits were linked to maladaptive eating behaviours in adults seeking bariatric surgery (Lent & Swencionis, 2012). Suzuki and colleagues (2012) explored alcohol use in bariatric surgery patients and found that it was more prominent for this population, than in the general. However, an earlier review of the literature by Ertelt and colleagues (2008) concluded that only a small number (fewer than three) of patients developed alcohol dependency post-surgery. As it currently stands, little is known about addiction after bariatric surgery, but a number of studies are starting to develop some ideas.

5.6 The Period of Change

The physical and psychosocial changes described by the participants reflected the findings of many other studies both quantitative and qualitative, in that they are

varied and unique to the individual. Therefore, only the prominent findings will be explored here.

5.7 Body Image & Shame

The current study found that the existence of loose skin appeared to have a huge impact on many participants' views about their body. Some existing studies suggested that body image is improved by GBS (Sarwer et al. 2010; Kolotkin et al. 2009). However, others have noted that loose skin can impair quality of life and accompany uncomfortable physical issues such as infection and ulceration (Zuelzer et al. 2007; Chandawarkar, 2006). This is another area where the current study results varied, which again, highlights the benefits of qualitative research that is able to retain the complexity of individual experiences.

Underlying narratives involved participants being both pleased to have lost weight, but also distressed by its impact upon their bodies. This links into other findings suggesting patients felt conflicted about their body image after surgery (Engstrom & Forsberg, 2011; Magaleno et al. 2011). The variability of distress experienced may be explained by the fact that some participant had undergone more corrective surgery for lose skin than others. An additional hypothesis is that patients who are more motivated to lose weight for the sake of appearance improvements, over those of physical health and longevity, are more likely to be displeased with their bodies after surgery.

A novel finding related specifically to the changing structure of the NHS, and the fact that many patients underwent GBS with the promise of corrective surgery to remove all of their excess skin. However, since having surgery, funding cuts in the NHS have been rife, and this promise was taken away from them, leaving many feeling

incomplete and let down by surgery. Those who had undergone corrective surgery, some funding it themselves, reported fewer issues with their bodies.

5.8 Clinical Recommendations

Given that a large number of the participants described feeling ashamed about their bodies after surgery, predominantly due to excess skin, one recommendation is that corrective procedures are more readily available. Furthermore, psychological support to address issues relating to body image may also be beneficial.

Another recommendation reflects the words of the participants in that there is great potential for more psychological support. Given that self-monitoring was found to be useful in promoting self-control after surgery, a mindfulness based intervention may help patients to become more aware of their internal cues, and may reduce the suffering arising from the physical states such as vomiting or hunger. Alongside this, some work on distress tolerance and finding alternative ways of self-soothing would be very helpful.

Given the participants' longstanding, complex histories and enduring experiences of shame, it was felt that many would have benefitted from long-term psychodynamic psychotherapy to address the underlying issues surrounding their eating patterns and addictive tendencies. However, given the current challenges faced by those working longer-term in the NHS, and the urgency required when needing to address these issues after surgery, an integrative approach, such as Cognitive-Analytic Therapy (CAT) or Compassion Focussed Therapy (CFT) may be more suitable.

A final recommendation is a suggestion that, prior to surgery, patients attend a "Service-User Information Day" during which members from the multi-disciplinary surgery team present information from their perspectives. This would provide patients

with information about the possible physical and psychological consequences of bariatric surgery and the opportunity to ask questions.

5.9 Research Recommendations

A few research recommendations have already been suggested thus far. However, the study has opened up many other areas and a number of specific recommendations are offered. The findings on food addiction are worthy of further exploration and a quantitative project making use of the YFAS (Gearhardt et al. 2009) with bariatric surgery patients could be undertaken. Furthermore, very little research evidence is available regarding the concept of "Addiction Transfer" and exploration of this concept may provide insight into understanding more about the experiences of bariatric surgery patients.

A final recommendation is based on the observation that many of the participants said that they liked to be involved in research, and that they wanted to give something back. A project utilising the collaborative Participatory Action approach could be carried out with the support group.

5.10 Limitations of the Study

Several limitations of the study relate to issues with the sample which consisted mainly of White British women. This leads to difficulties in generalisation and also the possibility that the study failed to highlight any differences in gender or ethnicity that may be pertinent. This is particularly important when taking into account gender differences in body image and the impact of culture on beliefs and attitudes towards obesity.

Another issue with the sample was the difficulty in using the Grounded Theory technique of theoretical sampling. Due to confidentiality and the constraints of working within an NHS context, the information required to sample theoretically was not available. This then leads to some issues with regards to the concept of saturation. Although the study claims to have reached saturation as no new categories emerged in the final interviews, caution is required.

The study was conducted in an area where bariatric surgery was more readily available. Recent information about bariatric surgery has used phrases such as "post code lottery" to allude to the idea that nationally there are differences in access to services. This could be seen as another limitation, in that the sample may only be generalisable to the local area. The critical appraisal will provide a more detailed account of other issues relating to reflexivity and researcher bias.

5.11 Conclusion

Obesity is a significant problem in England with increasing numbers of people turning to surgery to facilitate weight loss. The current study explored the experiences of individuals who had undergone GBS 36 to 96 months previously. Using grounded theory techniques, a large number of categories emerged from the participants' accounts, but a central theme of control was evident. The findings were integrated into a model that suggested that a number of factors could influence the development of self-control after surgery, and in turn, the maintenance of outcomes in the years that followed. The study has shed some light on the high degree of variability amongst existing published literature and has proposed a number of clinical and research recommendations.

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Section D

Critical Appraisal

Submitted in April 2012

By

Nicola Jane Buccheri

To the University of Leicester, School of Psychology, Clinical Section

In Partial fulfilment of the degree of

Doctorate in Clinical Psychology

1. Introduction

This paper will now provide a critique of the research process undertaken in carrying out this project. It is based on a reflective journal that I kept throughout and is written in the first person, because it echoes my personal thoughts and feelings. Therefore an emphasis on the affective aspects of reflexivity will be apparent. In qualitative research methods it is now widely accepted that a fundamental part of the process involves the researcher understanding not only the participants' experiences, but also their own. King (2002) stated that a "blueprint" for understanding ourselves as researchers does not exist, and that the "self" is not a static concept, but a complex one containing many, often contradictory components. I share this view, and will now present a paper that is very much tied up with my own experiences of trying to make sense of myself as a researcher.

2. Planning the Study

2.1 Why an Interest in Bariatric Surgery?

On a daily basis we are bombarded with information about living a healthy balanced lifestyle, and we are continually warned about the dangers of becoming obese. Television advertisements and food packaging are examples of many constant reminders of the governments concerns that obesity is on the increase. The media criticises people for being "too thin" or "too fat", and seeks to make money out of ridiculing those who struggle with their weight, whether it is over or under that of the "norm". The constant exposure to messages such as these is likely to influence any person's beliefs about eating and weight related issues, and are no doubt entwined with my more conscious motivations for this project. Culture also plays a part, and I would

like to state here that I come from an Italian background where food and eating are central components of family life.

At the start of this project I reflected on why I was so interested in bariatric surgery. On a surface level, to me food has always been associated with warm feelings of love and happiness. However, over the years, I have become more aware of my own internal conflict when it comes to food and have had to acknowledge my own fears of being overweight. As a researcher, I very much placed myself within a contextual constructivist viewpoint and therefore my role within this study went beyond simply that of a witness (Willig, 2008). When conducting research from this stance, one has to continually reflect on their internal world and be aware of the motivations for exploring such topics. I was aware that, through both personal and occupational experiences, I had developed great empathy for those who struggle with their weight, which accompanied a desire to help them. This driver is likely to be another key component in understanding my motivation for this project.

Prior to the course I worked in a medical psychology department and was involved in a project during which I reviewed the literature on Bariatric Surgery. The literature interested me and I was curious about how surgery affected people psychologically. I wondered how a surgical intervention could enable patients to successfully maintain weight loss without addressing the underlying psychological issues around eating. I noticed that a lot of the research contradicted itself and that researchers could not agree on the factors that made someone a suitable "candidate" for surgery.

I worked alongside a colleague who knew that I was starting the course, and we had many discussions about feasible and useful research projects. As a result, I had the support of a department even before my ideas were crystallised into a proposal. The fact

I already had links with a department also played a significant role in my choice of project, along with some of the personal issues and occupational aspects already described.

2.2 Developing the Research Proposal

Developing the research proposal involved several stages and required a number of drafts due to my changing ideas. I initially wanted to look at why bariatric surgery patients presented to psychological services after having the operation. Despite not much research in this area, this initial idea lack specificity and would have led to some great difficulties in accessing adequate numbers of participants, even for qualitative research. Following a meeting to discuss my initial ideas, I was advised to find a "niche" and to ensure that my intended area of investigation was feasible, but also clinically meaningful.

A second draft proposal was put together after I was allocated a research supervisor. We had some discussions about our interests and we thought about exploring the effectiveness of a mindfulness intervention for people who had undergone weight loss surgery. This would have involved creating a mindfulness group-based intervention, along with materials for the participants to take away with them (e.g. handouts and CDs with mindfulness exercises on). I was very much enthused by this idea and explored the existing literature on mindfulness and weight loss surgery. However, I felt that given the time frame I would not have been able to realistically take on this project. Therefore, a further proposal was developed.

Due to my ever increasing familiarity with the literature, I decided that it would be a worthwhile endeavour to understand more about what happens in the years that followed surgery. In putting together a proposal I wanted to ensure that the project was

feasible, so I made links with the local bariatric service and met with the team. The feedback I received was very positive in terms of the project being clinically significant and something that the service wanted to be involved in. So, I went ahead with this research idea.

2.3 Deciding on the Methodology

I was adamant at the start that the methodology would be driven by the research question (s), and given that I had proposed to explore patients' experiences of GBS, a qualitative approach was deemed the most suitable. I have to acknowledge, that prior to the course, I had a leaning towards quantitative methodologies. With hindsight, I possibly had an aversion towards qualitative research, especially given the messages I had received about issues relating to publishing. However, as time progressed, I became more enthused about the idea and have learnt that qualitative research is able to make an equally valuable contribution to published literature.

Other qualitative methods, such as Interpretive Phenomenological Analysis (IPA) were considered. But due to the anticipated lack of homogeneity within the sample, and the focus on a wide range of experiences, as opposed to a specific phenomenological experience (e.g. the process of having the surgical procedure), I felt Grounded Theory was the most appropriate method to adopt. Furthermore, I aimed to produce a theoretical model that I hoped would be useful for clinicians working with patients who had undergone GBS.

3. Collecting the Data

3.1 Recruitment and Sampling

Having gained all approvals by June 2011, I started recruiting participants. At this time I was very motivated to produce a piece of publishable research, and was initially greatly concerned that I would not be able to recruit enough participants to reach saturation. In response to these anxieties, I developed a secondary recruitment strategy that I planned to implement if recruitment became a problem. It involved approaching patients who attended the local bariatric surgery support group. I had planned to attend one of the meetings and also utilise the associated website to advertise my research. I looked into the approvals required for this, and began making the necessary preparations. However, a few weeks later it became evident that recruitment was not going to be an issue so I did not implement this secondary strategy, which was initially a relief, but later a slight disappointment.

In making links with this additional service, my insight into the experiences of people who have bariatric surgery greatened, and when I interviewed the participants I was familiar with the support group that they mentioned. The difficulties in sampling theoretically I encountered, might have been addressed by interviewing some participants from the group, and I now wish that I had pursued this. I am also left feeling that there is a potential research project involving people who attend this group, particularly because they appeared to be very keen and motivated.

3.2 Conducting the Interviews

3.2.1 The pilot interview. I conducted a pilot interview with a colleague in order to test out the schedule and practice my skills as an "interviewer". I found the feedback very useful and modified the schedule slightly so that it flowed better.

3.2.2 Therapist vs. interviewer conflict. During the early stages of the interview process I became aware of experiencing an internal conflict in which I wanted

to apply my clinical skills during the interview and had to consciously stop myself. Others researchers, who also work therapeutically, have also encountered this conflict (Flick, 2006). For example, in a therapeutic situation it is quite ordinary to summarise, reflect and offer formulation ideas about the material the client presents. Another example is of implicitly knowing what a patient is referring to, despite their spoken words not being overly coherent. I learnt that there were occasions where I had to ask the participants to elaborate on their meanings so that their own words were documented. I learnt to do this without invalidating their feelings and in a way that demonstrated I had heard them. Discussing this conflict in supervision greatly helped to normalise my experience of it, and enabled me to develop some skills to address it.

3.2.3 Potential power imbalances. Siedman (1998) pointed out that "the interviewing relationship is fraught with issues of power" (pp 83), and given that control was a central feature of the participants' accounts, it is vital to now explore some of the issues relating to power that were relevant during the interviews.

3.2.3.1 Differences in appearance and weight. I will begin by stating that I am not obese and have never been overweight. This is important to acknowledge, particularly given that body image emerged as an important issue. On occasions, some participants compared themselves to me and even questioned me on my weight. I found this slightly intrusive and wondered if, in part, this was a reflection of how they were feeling. Many said that a "thin" person would never be able to understand the situation they were in prior to surgery, and at times, this left me feeling quite powerless. I had to be constantly aware of how my body may have been perceived, and of the power dynamics that were at play between us. Again, reflecting on this in my research journal and discussing it in supervision enabled me to explore this issue and handle it sensitively when it arose.

3.2.3.2 Gender. Gender is another important factor that gives rise to power differentials. As a female researcher I could not escape the array of complex dynamics that emerged. Fifteen out of the 17 participants were female, and I became aware that, on occasions, I found myself relating to their experiences. Unconsciously, this had the potential to create a situation between myself and the participant which may have involved a false assumption of a shared perspective (Seidman, 1998). Furthermore, this could have meant that I failed to see other areas of exploration by being caught up in my own thoughts and experiences. During each interview I endeavoured to be aware of this, which helped me to own my part in it, and to reduce the risks it involved.

Also, when I interviewed the male participants I wondered if my gender would hold them back from talking about sensitive issues. However, this did not appear to impede the process but I was mindful that I only interviewed two men, and that in interviewing more, other issues may have arisen.

3.2.3.3 Age. Age is another area that may lead to power imbalances. I was aware that all of the people I interviewed were older than me and that there was always the potential for some participants to feel uncomfortable with this. In order to address this I sought to build rapport early on and utilised my skills in communication, and was careful not to come across in a way that might be perceived as patronising. Age differences did not appear to impede the process, but were important to reflect on.

3.2.3.4 Socio-economic status & ethnicity. I am a white British female educated to university level and the potential impact of this on the process must be acknowledged. Given my life experiences and clinical work, I am comfortable being with people from socio-economic and ethnic backgrounds different to my own. I have developed adaptable communication skills that I was able to transfer to the interview process. I found that all participants responded well to the open-ended questions and

were able to articulate themselves very clearly. In terms of ethnicity, the majority of the sample considered themselves to White British, with three participants being from what might be considered ethnic minorities. I was not aware of these issues having an immediate effect on the interview process, but am left feeling that more research, specifically exploring underrepresented groups in bariatric surgery population, such as male patients and those from black and ethnic minorities is required.

3.2.3.5 The patient-healthcare professional interaction. Another factor that may have influenced the power dynamics was the perception of me as a healthcare professional. Mruck & Mey (2010) pointed out that interviews involving "patients" had the potential for interviewees to use the process to communicate information to other professionals (e.g. doctors). I found that the participants often gave recommendations about what they thought the people involved in their care should have done (e.g. provided more after-care). With time, I became very aware of this dynamic and when it occurred I endeavoured to keep in mind the aims of the research and attempted to bring the focus back on the participants' experiences without invalidating the fact that they had important messages that they wanted to communicate.

3.2.4 Other factors influencing the process

3.2.4.1 Being a novice research interviewer. This was the first time that I had interviewed people for the purposes of research. Much of the literature regarding "novice interviewers" emphasises the need for adequate training (Roulston, deMarrais & Lewis, 2003) and, although I did have some teaching on this, I still had continual anxieties about my skills. I am raising this as an important issue influencing the process because I had to own my anxieties surroundings this in order to work through them. This is heavily linked into the conflict described earlier, and with time, I came to realise that as a trainee clinical psychologist my therapeutic skills of active listening, rapport

building, asking open-ended questions and being aware of non-verbal communication served me well as a research interviewer, and that I did have valuable skills that enabled me to develop in this area.

3.2.4.2 The interview setting. I acknowledged that the location of the interview may have had some impact on the participants' responses which is why they were given a choice to either be interviewed at home or at the hospital. I wondered if the patient-healthcare professional interaction would be more prominent within the hospital setting. However, this did not seem to be the case, and I felt that in giving the participants the choice of setting, they were able to be interviewed where they felt most comfortable and able to talk openly about their experiences.

3.2.4.3 The use of language. Within clinical psychology there is an aversion to labelling and there were times when I felt very uncomfortable with the use of terms such as "fat" and even "obese" to some degree. I was aware of this, but was also conscious of using participants own words to ensure that the findings were grounded in the data. I also had to become familiar with some medical terms that I had not encountered before such as "corrective surgery" and use of the phrase "apron" to refer to the loose skin that developed over patients genital areas after weight loss. My reflective journal was useful in learning to make sense of my feelings about weight related labels, and also, to document my learning of medical terms.

4. Analysing the Data

4.1 Using Grounded Theory

At the start of the project my knowledge of Grounded Theory was basic, and I felt quite overwhelmed with the amount of information that was available. I started with a few introductory texts (Bryant & Charmaz, 2010; Charmaz, 2006; Strauss & Corbin,

1998) and soon came to realise that "Grounded Theory" was much more abstract than I had imagined, and that a whole range of techniques were available to me. With hindsight, I wish I had used my study budget to attend additional training in Grounded Theory. Nevertheless, I was fortunate to have a research supervisor knowledgeable in the method who guided me through the process.

4.2 The Iterative Process

I found this a very challenging part of the research. I had embarked upon a cyclical process of interviewing, transcribing, and coding. As a result, I learnt to organise my time effectively in order for this to run smoothly. This was quite a stressful period, but I was able to totally immerse myself in the data and felt thoroughly connected to it for the six month period that I spent conducting the analysis.

I did have a persistent concern with regards to the literature review. Many Grounded Theorists stipulated that literature reviews should be delayed until the analysis has been completed due to the risk of existing theoretical constructs being imposed upon the data (Birks & Mills, 2011). I decided upon a compromise, which involved developing the search strategy whilst waiting for R&D approval. I also implemented it at this time and scanned the abstracts in order to get a sense of the number of papers available and the feasibility of the review question. I then left any further work on the literature until after the data analysis phase. I have to acknowledge, that there was always the potential for my familiarity with existing research to influence the coding process. Here I found memoing particularly useful as it enabled me to put down my thoughts freely and reflect on the degree to which they were grounded.

4.3 Reaching Saturation

Before starting a Grounded Theory study there is no way of knowing the sample size required and this uncertainty was quite anxiety-provoking, as previously stated. I felt that I did achieve saturation in the sense that further information was not adding to existing categories or altering them in any way and most authors' advise that this means saturation has been achieved (Stern, 2010). However, I am quite cautious to think of saturation as a concrete concept and the issues I encountered with theoretical sampling need to be taken into account as there was always the potential for further interviews to have generated novel information. If I were to do a Grounded Theory project of this manner again, I would try to address these issues by asking participants to provide more specific information prior to interviewing them and, as previously discussed, find alternative sources for recruitment.

4.4 Theoretical Integration

When it came to theoretical integration, I was initially clouded by my desire to present my findings in a way that answered the research questions explicitly. As a result of this, I develop three theoretical models, but later came to realise that their integration was driven by my predetermined desire to present the findings in this manner, as opposed to them being grounded in the data. Following this, I experienced what Clarke (2005) described as analytical paralysis, in that I felt very overwhelmed by the data and as though I could not take the analysis any further. After supervision I decided to distance myself from the whole research process for one week, during which I spent time relaxing and taking care of myself, with minimal memoing permitted. The break was incredibly beneficially and enabled me to return to the data with fresh eyes and work towards producing the end product. This period was one of considerable stress, and I learnt that sometimes, being too immersed in the data, can lead to a blind-sight

that had the potential to contribute towards enforcing predetermined ideas on to it. If I were to do this again, I would ensure that I scheduled in periods where I had time away from the analysis.

5. Quality Issues

5.1 My Epistemological Position

I initially found the concept of "epistemology" somewhat confusing and difficult to comprehend. After much reading around the topic I was able to take some time to consider my underlying assumptions about the world and the nature of reality (see appendix I). I did this very early on in the study, and as a result, was able to determine which approach to Grounded Theory was required. This was a very useful exercise and has increased my awareness of a researcher's need to be explicit about their own assumptions.

5.2 Reflexivity

The term "reflexivity" is a complex concept that takes on different meaning depending on a person's epistemological position. Thinking about reflexivity within a contextual constructivist paradigm requires the researcher to be open and upfront about their values and assumptions, but also to consider the impact that they have on the research process. I have attempted to do this in several ways, which have included keeping a reflective diary, using various forms of memos and through discussion in supervision. I hope by now that the reader will have been provided with some examples of my reflexivity, but I will offer some further examples.

I would like to begin by acknowledging that I am a trainee clinical psychologist who is currently working within a community mental health team (CMHT) using an

integrative approach to client work. I am also on placement in a Dynamic Psychotherapy Department and have been for the majority of the research process. Working within the psychodynamic frame has exposed me to many concepts that I felt had the potential to pull me towards a particular direction when analysing the data. At a crucial point in integrating the theory I was studying material related to ideas about "holding" and "containment". Naturally, given the degree to which I was immersed in the data, I was aware that many of the concepts were relevant to the participants' experiences. At one point I was preoccupied by the idea of the bypass being viewed as "persecutory" by those who cheated it. My reflective journal enabled me to constantly monitor this and to separate out that which would be appropriate for the analysis and that for the discussion.

Furthermore, the depth of the interview sometimes aroused intense emotions within me, particularly when the participants recalled experiences that revealed vulnerable parts of themselves. A number of psychodynamic processes are inevitably at work during interviews (King, 2002). Given my familiarity with psychodynamic thought and my preference for working within this model, I was acutely attuned to my counter-transference responses during each interview. This was very helpful as it enabled me to, first of all manage the emotional impact of the process, and secondly, to make sense of the emotions I was left with. An example of this was during one interview when I felt quite frustrated and controlled by the participant, to the degree where I felt that my role as "interviewer" was redundant. As the interview progressed, the participant went on to describe feeling controlled by her mother from an early age, and spoke of her life-long struggle with self-esteem during which she used food to rid herself of feelings of anger and frustration. In linking my feelings with the material occurring in the interview, I was able to move on from them. I also avoided being

drawn into any collusive or defensive behaviour, which can sometimes be the case when caught up in powerful dynamics involving intense emotions. My reflective journal was particularly useful for this purpose, as it provided me the reflective space that I required to express my feelings honestly, as well as explore those that I had to own as mine.

6. Personal and Professional Development

6.1 Developed Professional Skills

As a result of undertaking this research project I feel that I have developed many professional skills. I have learnt much about qualitative research, particularly Grounded Theory methodologies, and recognise the valuable contribution qualitative approaches make to research. Embarking upon the iterative process strengthened my existing organisational and time management skills. I also feel as though I have developed my ability to "sit with", and tolerate, uncertainty which I feel is an important skill for a clinical psychologist to master. I have grown in confidence in my research and academic abilities, and feel that I have been able to improve my writing style during the process.

6.2 Personal Impact of the Research

In writing this paper I feel that to leave out a discussion of the personal impact of the research would leave it incomplete. In addition to developing many professional skills, I have also been on my own journey of self-discovery. Becoming totally immersed in the data, and the continuous self-reflection, enabled me to connect up with parts of myself of that I was previously unaware.

By this, I mean that, I started to question my own use of food as a means of self-soothing, particularly in times of stress. I think it is acceptable to say that food can be used in many different ways, both consciously and unconsciously, by us all. As previously stated, I come from an Italian background where food has always played a huge part of my life and accompanied feelings of happiness and comfort. As the research progressed, I became much more aware of my own pattern of guiltily seeking comfort in food. This might not be to the same degree as those who have weight difficulties, but nevertheless, the feelings were still there. In having this awareness, I started to challenge this pattern and was able to break the cycle by finding others ways to manage my stress (e.g. playing the piano, listening to music and learning to be more organised). I also learnt to be more self-compassionate, and now seek to make more conscious efforts to take care of myself.

7. Final Thoughts

I have written this piece in an open and reflective way that I hope provides the reader with some insights into my personal experiences throughout the research process. I feel that much strength and learning can be gained in taking a non-defensive approach and I have admired the writers who openly expose the reader to their most vulnerable sides.

I have found undertaking this project enjoyable, and feel that I have developed many valuable skills in the process. It has challenged my initial fears about carrying out qualitative research and I now strongly believe in the benefits of using such methodologies. I want to end by stating that I feel ethically bound to publish my findings and am very motivated to do so. I hope that they will make a valuable contribution to the existing literature, and ultimately, be of benefit to patients and healthcare professionals alike.

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Section E

Appendices

Submitted in April 2012

By

Nicola Jane Buccheri

To the University of Leicester, School of Psychology, Clinical Section

In Partial fulfilment of the degree of

Doctorate in Clinical Psychology

Appendix A

Author Guidelines for Obesity Surgery

Author Guidelines for Obesity Surgery

OBESITY SURGERY
INSTRUCTIONS FOR AUTHORS

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Effective January 2010: Obesity Surgery no longer accepts Case Report submissions for publication.

GENERAL

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- Double-space the text
- Use italics for emphasis
- Use the automatic page numbering function to number the pages
- Do not use field functions
- Use tab stops or other commands for indents, not the space bar
- Use the table function, not spreadsheets, to make tables

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2. This result was later contradicted by Becker and Seligman [5].
3. This effect has been widely studied [1-3, 7].

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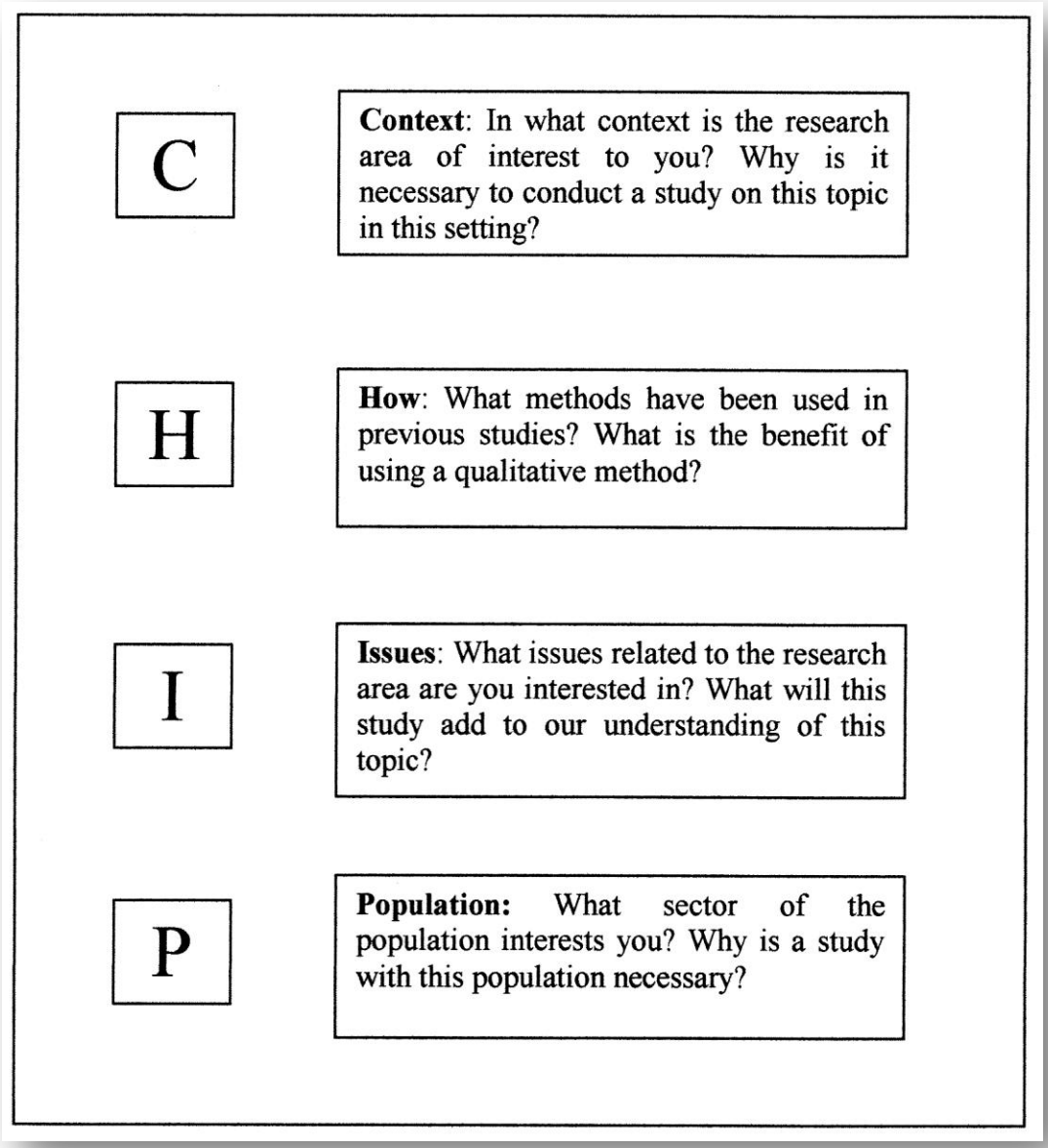
Appendix B

Guidance for the Search Strategy - The CHIP tool

Guidance for the Search Strategy - The CHIP tool

(Taken from Shaw, 2010, pages 43 & 54)



Appendix C

Audit Trail of the Search Strategy

Audit Trail of the Search Strategy

Databases Searched	Time Frame								
	May – June 2011			January 2012			March 2012		
	Articles Returned	Articles Meeting Criteria	Number of Duplicates	Articles Returned	Articles Meeting Criteria	Number of Duplicates	Articles Returned	Articles Meeting Criteria	Number of Duplicates
PsychInfo*	53	7	0	62	9	7	63	9	9
Science Direct	391	2	2	457	2	2	476	2	2
Journal of Obesity Surgery (via Springer Link)	1001	7	6	1099	7	6	1200	7	6
ISI Web of Knowledge	358	7	6	402	7	6	437	8	7
Scopus	27	4	4	31	4	4	34	4	4
Pubmed	49	3	3	53	3	3	61	3	3
Medline (via Ovid)	8	0	0	9	0	0	15	0	0
NHS Evidence Healthcare Database	217	5	5	236	5	5	250	5	5

*The following filters were also used within the "advanced search" option: Qualitative Research

Appendix D

Criteria for Identifying “Fatally Flawed” Papers

Criteria for Identifying "Fatally Flawed" Papers

(Taken from Dixon-Woods et al. 2006)

1. Are the aims and objectives of the research clearly stated?

2. Is the research design clearly specified and appropriate for the aims and objectives of the research?

3. Do the researchers provide a clear account of the process by which their findings were produced?

4. Do the researchers display enough data to support their interpretations and conclusions?

5. Is the method of analysis appropriate and adequately explained?

Appendix E

Data Extraction Form

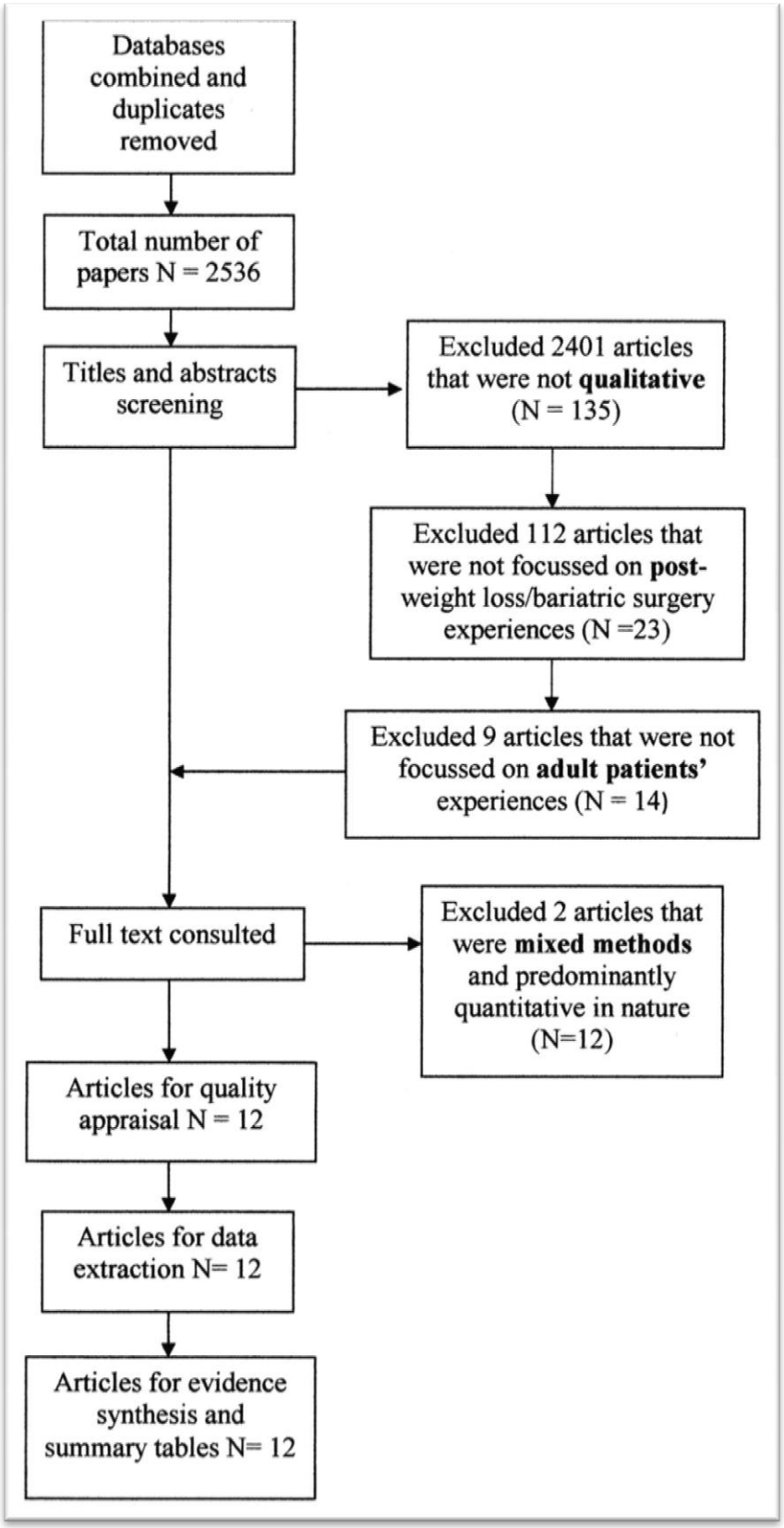
Data Extraction Form

<table>
<tr><td colspan="3">Study Details:</td></tr>
<tr><td>Discipline of Researchers:</td><td colspan="2"></td></tr>
<tr><td>Aims/Objectives:</td><td colspan="2"></td></tr>
<tr><td>Research Question(s):</td><td colspan="2"></td></tr>
<tr><td rowspan="3">Methods:</td><td colspan="2">Sampling:</td></tr>
<tr><td colspan="2">Data Collection:</td></tr>
<tr><td colspan="2">Data Analysis:</td></tr>
<tr><td>Sample Characteristics:</td><td colspan="2"></td></tr>
<tr><td>Results:
(Key themes/categories/ Headings, etc)</td><td colspan="2"></td></tr>
<tr><td>Conclusions:
(Clinical/Research implications)</td><td colspan="2"></td></tr>
<tr><td colspan="2">Researcher Epistemological/ Theoretical Stance:</td><td>Evidence of Reflexivity?</td></tr>
</table>

Appendix F

Flow Chart of Review Process

Flow Chart of Review Process



Appendix G

The Research Tools

1. Participant Introductory Letter & Reply Slip

2. Participant Information Sheet

3. Consent Form

4. Interview Schedule

Participant Introductory Letter & Reply Slip

University Hospitals of Leicester NHS
NHS Trust

Leicester Royal Infirmary
Leicester
LE1 5WW

Tel: 0300 303 1573
Fax: 0116 258 7565
Minicom: 0116 287 9852

Patient Address

Date

Dear (Patient Name),

Re: Research Study titled Patients Eating Patterns and Behaviours after Gastric Bypass Surgery.

I hope that you are keeping well. I am writing to you because I would like to invite you to take part in a research study about peoples' experiences of having weight loss surgery. The study is being carried out by the University of Leicester and you have been selected to take part because you had a gastric bypass operation three or more years ago.

In order to help you decide whether or not you would like to take part it is very important that you understand what the research is about and why it is being carried out. Therefore, along with this letter, you will find an information sheet telling you about the research and what you need to do if you would like to participate.

It is your choice as to whether or not you do so. If you decided not to take part, this will not have any effect on your care. If you would like to know more about the study then please contact the lead researcher, Nicola Buccheri, at nb72@le.ac.uk or telephone 0116 2231639.

If after reading the information sheet you feel you would like to take part then please fill out the enclosed reply slip and send it in the stamped addressed envelope provided.

I wish you all the best in the future.

Yours sincerely,

Mr [redacted]
Consultant Surgeon

Reply Slip

Re: Research Study titled Patients Eating Patterns and Behaviours after Gastric Bypass Surgery.

Name:

I have read through the participant information sheet and would like to take part in the study name above.

The best way to contact me is: (please tick and provide details)

☐ By telephone. My number is: _____

☐ By post. My address is: _____

☐ By email. My email address is: _____

Please expect to hear from the lead researcher, Nicola Buccheri, within two weeks of this reply being received.

Please also note that the interviews will take place over a period of several months. So if you do decide to take part, you will have the opportunity to arrange a date that will hopefully be convenient to you.

Trust Headquarters, Gwendolen House, Gwendolen Road, Leicester, LE5 4QF
Tel: 0116 258 8665 Fax: 0116 258 4666 Website: www.uhl-tr.nhs.uk
Chairman Mr. Martin Hindle **Chief Executive** Malcolm Lowe-Lauri

Participant Information Sheet

Version 2: Dated 14/03/2011

University Hospitals of Leicester NHS
NHS Trust

Leicester Royal Infirmary
Leicester
LE1 5WW

Tel: 0300 303 1573
Fax: 0116 258 7565
Minicom: 0116 287 9852

University of Leicester

PARTICIPANT INFORMATION SHEET

Study on Patients Eating Patterns and Behaviours after Gastric Bypass Surgery

We would like to invite you to take part in a research study which is being undertaken by a postgraduate Clinical Psychology student as part of her doctoral degree course. In order to help you decide whether or not you would like to participate in this study it is important that you understand why the research is being carried out and what your involvement would be. Please take the time to read the following information. To help you decide whether or not you would like to take part in this study it might also help if you talk to other people about it.

What is the purpose of the study?

The purpose of this study is to find out more about how having gastric bypass surgery affects patients eating habits and behaviours. We are also interested to explore how these have changed in the years that followed surgery and how they compare to eating habits/behaviours that were present before. We are interested in hearing individual stories about how surgery has affected patients' lives and how they have coped over the years.

Why have I been invited?

You have been invited to take part in this research because you had a gastric bypass operation three or more years ago and we would like to talk to you about your experiences.

Do I have to take part?

It is completely up to you whether or not you take part in this study. If you do not want to take part then it will not affect your care or treatment. If you choose not to respond to this letter you will not be contacted again by the research team.

What will happen if I take part?

If you do decide to take part you will have the opportunity to talk directly to the researcher about what it will involve and have any questions answered. Next, if you still want to take part you will be invited to attend an interview. During the interview you will be asked to talk about your experiences of having gastric bypass surgery. This will either take place at the Leicester Royal Infirmary or in your home. This would be your choice. The interview will be recorded using a small digital

recorder. If at any stage in the process you decide that you do not want to take part in the study you will not be contacted again by the research team.

What are the possible disadvantages and risks of taking part?

During the interview you will be asked to talk about your life experiences surrounding eating and the impact of having the operation. This may stir up some emotions for you which may be difficult to talk about. You will not be pressured into talking about anything that you feel uncomfortable with and you are in control of how much information you wish to disclose. You do not have to answer all of the questions asked of you if you feel uncomfortable doing so. However, people often find it helpful to talk about experiences they have been through.

What are the possible benefits of taking part?

While there are no guaranteed benefits of taking part in this study you would be contributing to a piece of research that will hopefully enable healthcare professionals to learn more about how surgery affects patients in the years that follow. This may in turn also contribute to learning about ways that may help patients to get the most out of their treatment. Furthermore, as mentioned above, people generally find it helpful to discuss their life changing experiences.

What happens when the research stops?

You will be contacted by the researcher on two occasions if you wish to take part in the study. Once all of the interviews have been completed the researcher will write up the findings in a report. The information contained within the report will keep the identity of all participants anonymous. You will be offered a copy of this report if you would like one. The original recordings of your interview will be deleted from the recording machine as soon as they have been transcribed and will be kept on a password protected computer for 12 months in a secure file. After this 12 month period they will be deleted. After the research has stopped all anonymous paper transcripts will be kept in a secure location at the University of Leicester for 5 years. After this period they will be shredded by the University.

What will happen if I don't want to carry on with the study?

You will be able to withdraw from the study at any time. This will not influence your care in any way and you will not be contacted by the research team again.

Further Support

If during the interview you became upset, depending on the nature and cause of your distress you may be advised to contact your GP. Alternatively the researcher will be able to provide you with information on where to access other sources of support. These include local counselling services and a support group for people who have had weight loss surgery. For further information about the group call 0116 265 3021 or visit www.wlsinfo.org.uk. The Leicester Counselling Service is a confidential service for people seeking emotional support and can be contacted on 0116 2558801.

Will my taking part in the study be kept confidential?

All of the information that you provide will be kept strictly confidential. No information that could identify any of the participants will be presented within the report of the findings. However, there are limits to confidentiality which may have to be broken if the researcher becomes concerned about your well-being or that of another. This may happen if you disclosed some information that suggested that you are at risk of harm, or that you might act to put another at risk of harm. In these rare cases, your GP would be contacted. For this reason we will ask you to provide us with your GP details. Wherever possible this will be discussed with you first.

What will happen to the results of the research study?

As already mentioned the results of the study will be written up into a report which will be sent to you unless you state that you would not like to receive a copy. It will also be submitted for publication in a journal relevant to the topic of weight loss surgery and handed in to the University of Leicester as part of the lead researcher's doctoral thesis. In addition to this, the results will be given to the care teams involved in the research.

Who is organising and funding the research?

This study is being organised by the University of Leicester and will be funded by Leicestershire Partnership NHS trust.

Who has reviewed the study?

This study has been reviewed by several people at the University of Leicester and NHS Research Ethics Committee approval has been obtained.

Further information and contact details

For further information please contact the lead researcher, Nicola Buccheri, at nb72@le.ac.uk or telephone 0116 223 1639.

Who do I contact if I have a complaint about this study?

If you feel that you would like to make a complaint about something to do with this study then please contact the following person: Dr Sheila Bonas, Clinical Psychology, University of Leicester, 104 Regent Road, Leicester, LE1 7LT. Tel: 0116 223 1648 Fax: 0116 223 1650

What to do next?

If after reading this information you are interested in taking part please send back the reply slip in the stamped addressed envelope (both enclosed). The lead researcher will then contact you via your preferred method to arrange a suitable time to discuss the study further and answer any of your questions.

Many thanks for taking the time to read this information.

Trust Headquarters, Gwendolen House, Gwendolen Road, Leicester, LE5 4QF
Tel: 0116 258 8665 Fax: 0116 258 4666 Website: www.uhl-tr.nhs.uk
Chairman Mr. Martin Hindle **Chief Executive** Malcolm Lowe-Lauri

Consent Form

Version 3: Dated 21/05/2011

University Hospitals of Leicester NHS
NHS Trust

University of Leicester

Leicester Royal Infirmary
Leicester
LE1 5WW

Tel: 0300 303 1573
Fax: 0116 258 7565

CONSENT FORM: VERSION 3

Title of Project: **Long Term Consequences of Gastric Bypass Surgery: A Qualitative Study of Patients Eating Patterns and Behaviours**

Name of Researcher: Miss Nicola Buccheri Please initial box:

1. I confirm that I have read and understand the **Participant Information Sheet Version 2 dated the 14th March 2011** for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. ☐
2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my medical care or legal rights being affected. ☐
3. I understand how the information I give is going to be stored and used by the researcher named above and I give my permission for this. ☐
4. I give my permission for the lead researcher to have my GP name and contact details. ☐
5. I understand that confidentiality may have to be breached if I disclosed information that suggested that I or another person was at risk of harm. ☐
6. I understand that relevant sections of my medical notes may be looked at by responsible individuals from the study team, the sponsor, NHS Trust or from regulatory authorities where it is relevant to my taking part in the research. I give permission for these individuals to access my records. ☐
7. I agree to take part in the above study. ☐

_____	_____	_____
Name of Participant	Date	Signature
_____	_____	_____
Name of Person Taking Consent	Date	Signature

(When completed: - 1 copy for the participant; 1 copy for the lead researcher, 1 (original) to be kept in medical notes).

Interview Schedule

Pre-interview Tasks

- Welcome the participant to the interview and thank them agreeing to participate.
- Go though the patient information sheet and discuss important issues related to confidentiality (and its limits), data storage, emotive issues, and their right to withdraw at any point in the research process.
- Show the participant the digital recorder and tell them when it will be turned on.
- Ask the participant if they have any questions/queries, and remind them that they are in control of the process and the information that they choose to share.
- Go through the consent form and sign two copies; one for the participant, one for the researcher.
- Ask the participant for demographic information and their GP details (as discussed prior to signing the consent form).

Interview Topic Areas

1. To being with, can you tell me about what factors lead to you having gastric bypass surgery?
2. Can you recall what your thoughts and feelings were at this time? (any expectations/goals)
3. Can you describe what your eating patterns were like prior to the surgery?
4. Did you try to change your eating patterns before having surgery? If so, can you tell me about your experiences?
5. Can you tell me about your thought and feelings in the run up to your operation?
6. Can you describe what your eating patterns were like during the first 6 weeks after the surgery?
7. How did you cope with the changes to your diet?
8. What was life like during this time? (thoughts/feelings/complications).
9. After the first few months did your eating habits change with time? If so, can you describe how?
10. What were your thoughts and feelings in relation to this?
11. How did these experiences of eating affect your relationship with food?
12. How would you describe your eating patterns and relationship with food now?
13. How would you describe how your weight changed over the years? (time period)
14. What other changes did you notice as a result of having the surgery?
15. How did these changes progress with time?

16. What support was available to you along the way? (prior, during and post)
17. How did you engage with it (or not)?
18. Overall, how do you feel you adjusted to the surgery?
19. What do you think helped you to adjust/cope with having your operation?
20. Is there anything that you did not find helpful?
21. Is there anything else that you think would be important to talk about today?

Further prompts to deepen exploration

- Do you have an example?
- Can you tell me more about that?
- What does that mean to you?
- How did you feel about that?
- What did you think about that?

De-brief

After the digital recorder has been switched off, the researcher will ask the participants how they found the interview and answer any further questions they may have. The researcher will also give the participant an indication of when they can expect to hear the results, should they wish to.

Appendix H

Examples of Coding

1. Line-by-Line Coding

2. Axial Coding

Line-by-Line Coding

Coding	Participants Account
Feeling addicted to food prior to GBS and feeling that GBS has not changed those tendencies	I'm addicted to food, still am addicted to food. That ain't changed.
Making the joint decision to have GBS Over gastric band due to existing eating patterns and food addiction Feeling that was the only way.	Hence why we chose the surgery that we did. There was talk of band, erm, but I decided that this is what I wanted and [my consultant] agreed because of my eating patterns. I am addicted. There is no other way around it.
Spending money on savoury food to eat in secret Hiding food packaging from others Comparing food addition to bulimia but highlighting the differences of not being sick.	I would go and spend fifteen to twenty pound in a supermarket on savoury stuff and eat the lot then hide the packing. When I was talking to somebody they said it was very much like bulimia. I just didn't make myself sick.
Feeling that food is valuable Eating large quantities and hiding the packaging, eating in secret, feeling that eating patterns have not been altered by GBS.	Because I valued food too much. Erm, but I'd binge eat and I'd hide all the packaging. It was a very secretive thing and them tendencies haven't gone away.

Axial Coding

Coding (Property)	Participants Account
Feeling addicted to food (Pre-surgery) Feeling addicted to food (Post-surgery)	I'm addicted to food, still am addicted to food. That ain't changed.
Choosing bypass due to food addiction	Hence why we chose the surgery that we did. There was talk of band, erm, but I decided that this is what I wanted and [my consultant] agreed because of my eating patterns. I am addicted. There is no other way around it.
Binge-eating / eating in secret Feeling addicted to food (comparing with other disorders)	I would go and spend fifteen to twenty pound in a supermarket on savoury stuff and eat the lot then hide the packing. When I was talking to somebody they said it was very much like bulimia. I just didn't make myself sick.
Valuing food Binge Eating / Eating in Secret	Because I valued food too much. Erm, but I'd binge eat and I'd hide all the packaging. It was a very secretive thing and them tendencies haven't gone away.

Appendix I

Audit Trail of Saturation

Audit Trail of Saturation

Transcript Number	Category Title	New category?	New Property?
1	Losing Control over weight	Yes	-
	Self-soothing with food	Yes	-
	Unsuccessful attempts to lose weight	Yes	-
	Guilt and Shame	Yes	-
	Surgery as the last resort	Yes	-
	Physical health changes	Yes	-
	Experience weight loss	Yes	-
	Mood changes	Yes	-
	Changing views about body	Yes	-
	Engaging with support	Yes	-
	Feeling restricted	Yes	-
2	Losing Control over weight	No	Yes
	Unsuccessful attempts to lose weight	No	Yes
	Self-soothing with food	No	Yes
	Feeling addicted to food	Yes	-
	Still feeling addicted to food	Yes	-
	Mood changes	No	Yes
	Learning about surgery	Yes	-
	Guilt and Shame	No	Yes
	Changing views about body	No	Yes
	Relationship Changes	Yes	-
	Developing self-control	Yes	-
	Viewing bypass as a tool/aid	Yes	-
	Learning to self-monitor	Yes	-
	Engaging with support	No	Yes
	Feeling restricted	No	Yes
3	Developing another addiction	Yes	-
	Mood Changes	No	Yes
	Changing views about body	No	Yes
	Improved self-confidence	Yes	-
	Readdressing Lifestyle Balance	Yes	-
	Working through issues with food	Yes	-
	Learning to self-monitor	No	Yes
	Engaging with support	No	Yes
4	Viewing bypass as a tool/aid	No	Yes
	Readdressing Lifestyle Balance	No	Yes

	Working through issues with food	No	Yes
	Engaging with support	No	Yes
5	Developing compulsive behaviours	Yes	-
	Relationship changes	No	Yes
	Physical Health changes	No	Yes
	Working through issues with food	No	Yes
	Feeling addicted to food	No	Yes
6	Cheating the bypass	Yes	-
	Reverting back to old eating patterns	Yes	-
	Learning about surgery	No	Yes
	Still experiencing guilt and shame	Yes	-
7	Learning to self-monitor	No	Yes
	Reverting back to old eating patterns	No	Yes
	Still self-soothing with food	No	Yes
	Learning about surgery	No	Yes
	Physical Health changes	No	Yes
8	Developing a new addiction	No	Yes
	Working through issues with food	No	Yes
	Learning to self-monitor	No	Yes
	Self-soothing with food	No	Yes
9	Experiencing guilt and shame	No	Yes
	Cheating the bypass	No	Yes
	Reverting back to old eating patterns	No	Yes
	Still experiencing guilt and shame	No	Yes
	Feeling addicted to food	No	Yes
10	Readdressing lifestyle balance	No	Yes
	Mood changes	No	Yes
	Changing views about body	No	Yes
	Physical health changes	No	Yes
11	Learning to self-monitor	No	Yes
12	Still self-soothing with food	No	Yes
	Working through issues with food	No	Yes
13	Learning to self-monitor	No	Yes
14	Learning about surgery	No	Yes

	Changing views about body	No	Yes
15	(None)	No	No
16	(None)	No	No
17	(None)	No	No

Appendix J

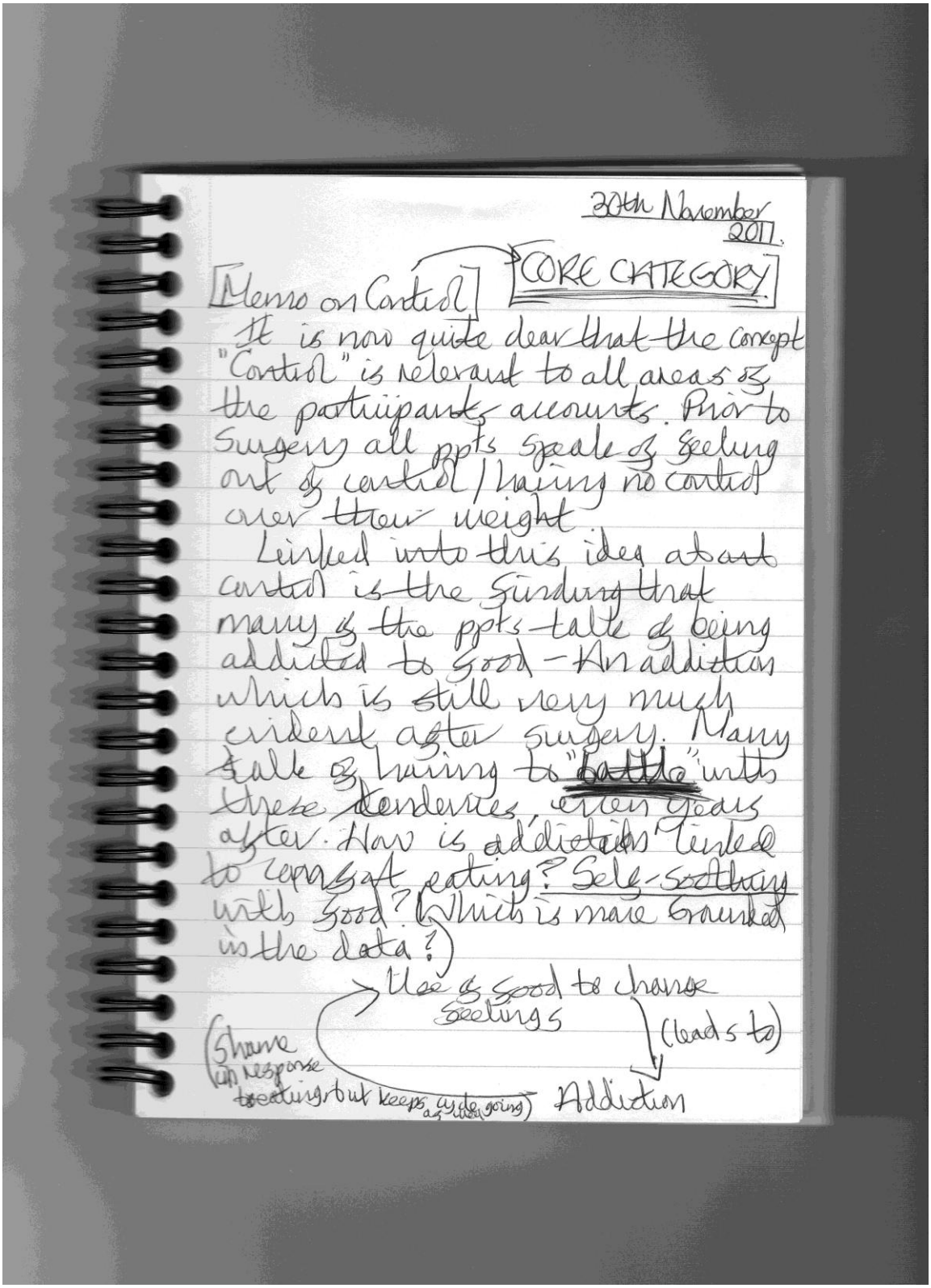
Examples of Memos

1. Written Memo

2. Diagrammatical Memo

3. Electronic Memo

Written Memo



Diagrammatic Memo

Electronic Memo

5th December 2011

Memo on Self-Monitoring

The purpose of this memo is to document all dimensions of the category now titled "learning to self-monitor". Over the course of the interviews a number of different issues have arisen, which all appear to be linked to the concept of self-monitoring. These will now be summarised:

Many of the participants spoke of the transition from "sloppy" to solid food. During this they described learning how to eat again and described the process as being a period of trial-and-error. This involved trying out particular foods, combinations of foods, amounts, etc. The aftermath of this resulted in transformed eating patterns which involved smaller portions, different food types and eating more regularly.

An important part of this process appears to be the ability to monitor and respond to internal physical states of hunger, satiety, but also those more intense states induced by the bypass, such as nausea and "dumping" (the sugar rush).

Some spoke of wanting to avoid vomiting and dumping and that the simple fact the bypass brought on such horrible side effect meant that they used them to change their eating habits.

Links with control: This category depicts another component involved in the development of self-control and contributes to the overall model.

NB: Also need to include monitoring of cognitive/emotional states as well as physical states. Think about how this links into other categories.

Appendix K

Trainee's Statement of Epistemological Position

Statement of Trainee's Epistemological Position

The trainee considered their epistemological position very carefully at the start of the project due to an understanding that research involves an interpretive process that is shaped by the researcher's belief systems about the world and how it operates (Denzin & Lincoln, 2005). Furthermore, the trainee was also aware that there are several ways to approach a Grounded Theory study (Birks & Mills, 2011). Hence, in discerning an epistemological position at the start of the project, the trainee was able to decide upon the appropriate methodological techniques to use from the outset.

As pointed out by Guba & Lincoln (2004), the existence of reality is an open question, but one that shapes Grounded Theory methods. The trainee held a "relativist" view about reality, meaning that reality is considered to be "relative to a specific conceptual scheme, theoretical framework, paradigm, form of life, society or culture" (Bernstein, 1983 as cited in Birks & Mills, 2011, p. 51).

Taking this into account, the trainee's epistemological position was that of "contextual constructionism". Constructionism rejects the idea of one reality and assumes that all participant and researcher accounts are be permeated with subjectivity (Madill et al. 2000). Contextualism refers to the position that all action must be understood within the context in which it occurs. Therefore, the way in which research data is gathered and analysed, plays a significant role in understanding and interpreting the findings. To consider them outside of this context would be misleading.

Madill et al. (2000) pointed out that both participant and researcher narratives are saturated with subjectivity. However, when conducting research positioned within a contextualist framework, researchers seek to ground the data and strive to demonstrate

this by providing descriptive quotations, an approach adopted by the current research report.

References

Birks, M., & Mills, J. (2011). *Grounded Theory: A Practical Guide*. London: Sage Publications

Denzin, N., & Lincoln, Y. (2005). *The Sage Handbook of Qualitative Research (Third Edition)*. London: Sage Publications

Guba, E., & Lincoln. Y. (2004). Competing paradigms in qualitative research. In S.N. Hesse-Biber & P. Leavy (Eds.), *Approaches to qualitative research: A reader on theory and practice* (pp. 17 – 38). New York: Oxford University Press.

Madill, A., Jordan, A., Shirley, C. (2000). Objectivity and reliability in qualitative analysis: Realist, contextualist and radical constructionist epistemologies. *British Journal of Psychology*, 91, 1 – 20.

Appendix L

Letters to and from the Research Ethics Committee (REC)

1. Provisional Opinion Letter from the REC

2. Trainee's Letter in Response to the Provisional Opinion Letter

3. Confirmation of Ethical Approval

Provisional Opinion Letter from the REC

NHS
Health Research Authority

Leicestershire, Northamptonshire & Rutland Research Ethics Committee 2

The Old Chapel
Royal Standard Place
Nottingham
NG1 6FS

Telephone: 0115 8839368
Facsimile: 0115 8839294

25 February 2011

Miss Nicola Buccheri
Trainee Clinical Psychologist
Leicestershire Partnership Trust
Department of Clinical Psychology
104 Regent Road
Leicester
LE1 7LT

Dear Miss Buccheri,

Study Title: **Long-term Consequences of Gastric Bypass Surgery: A Qualitative Exploration of Patients Eating Patterns and Behaviours**

REC reference number: **11/EM/0025**

The Research Ethics Committee reviewed the above application at the meeting held on 17 February 2011.

Documents reviewed

The documents reviewed at the meeting were:

Document	*Version*	*Date*
Letter of invitation to participant	1	31 January 2011
REC application	70697/184473/1/595	31 January 2011
CV - Academic Supervisor		
Reply slip	1	31 January 2011
Participant Information Sheet	1	31 January 2011
Participant Consent Form	1	31 January 2011
Investigator CV		31 January 2011
Protocol	4	26 January 2011
Interview Schedules/Topic Guides	1	31 January 2011
Internal Peer Review Form		16 November 2010

Provisional opinion

1. The Committee noted that the risks and ethical issues involved in the study are around embarrassment and questioned how this will be handled by you for example during the interviews.

2. The Committee expressed concerns about how it could be assured that the data is kept secure after it is recorded and before transcription.

A Research Ethics Committee established by the Health Research Authority

3. The Committee identified that the interviews will be transcribed at your home and queried how this would be secure. They added that they were concerned about the potential for loss of data and suggested that a back-up system should be in place.

4. The Committee questioned whether nine to 12 months is long enough to store the data.

5. The Committee discussed the Participant Information Sheet and agreed that there are several amendments required.

6. The Committee suggested that you may have problems securing the desired cohort as those individuals who have put weight on will not be likely to want to participate however they agreed that this was a methodological issue as opposed to an ethical one.

The Committee is unable to give an ethical opinion on the basis of the information and documentation received so far. Before confirming its opinion, the Committee requests that you provide the further information set out below.

The Committee delegated authority to confirm its final opinion on the application to the Chair.

Further information or clarification required

1. Written confirmation should be provided as to how the issue of embarrassment will be handled during the interviews.

2. Written confirmation should be submitted regarding how the data will be kept secure between recording and transcription.

3. It should be confirmed about how the data will be kept secure whilst being transcribed at your home.

4. Clarification should be provided that a back up system for the data is in place.

5. Clarification should be submitted about whether the data is proposed to be stored for the appropriate length of time.

6. The following amendments should be made to the Participant Information Sheet:

   a) It should be made clear that confidentiality may be broken if something untoward is disclosed.

   b) It should be made explicit that the benefits to participants cannot be guaranteed.

   c) It should be stated how and when the data will be destroyed.

   d) It should be made clear that the study is a student project.

   e) Contact details for complaints should be inserted.

   f) It should be made clear that if an individual does not wish to participate then they will not be contacted again.

   g) A contact for support in the event that a participant becomes distressed should be identified.

h) The method of recording should be made clear.

i) The document should be checked through for typographical and spelling errors.

7. The following amendments should be made to the Consent Form:

a) It should be made clear that confidentiality may be broken if something untoward is disclosed.

b) Point one should be updated to refer to the new version number and date of the Participant Information Sheet.

When submitting your response to the Committee, please send revised documentation where appropriate underlining or otherwise highlighting the changes you have made and giving revised version numbers and dates.

If the committee has asked for clarification or changes to any answers given in the application form, please do not submit a revised copy of the application form; these can be addressed in a covering letter to the REC.

The Committee will confirm the final ethical opinion within a maximum of 60 days from the date of initial receipt of the application, excluding the time taken by you to respond fully to the above points. A response should be submitted by no later than 25 June 2011.

Membership of the Committee

The members of the Committee who were present at the meeting are listed on the attached sheet.

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees (July 2001) and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

11/EM/0025	**Please quote this number on all correspondence**

Yours sincerely,

pp J. Parliament

Mr Ken Willis
Chair

Email: susie.cornick-willis@nottspct.nhs.uk

Enclosures: *List of names and professions of members who were present at the meeting and those who submitted written comments.*

Copy to: *Sponsor / R&D Department for NHS care organisation at lead site – LPT*

Leicestershire, Northamptonshire & Rutland Research Ethics Committee 2

Attendance at Committee meeting on 17 February 2011

Committee Members:

Name	*Profession*	*Present*	*Notes*
Mr John Aldridge	Senior Lecturer in Nursing	Yes	
Dr Timothy Bedford	Consultant Anaesthetist	Yes	
Ms Elaine Blackshaw	Clinical Trial Manager	Yes	
Mr Geoff Dickens	Research Manager	No	
Dr Susan Dyson	Doctor of Education, Head of Nursing & Midwifery Research	No	
Mrs Lorenza Francescut	Research Assistant	Yes	
Mrs Anita Hughes –co-opted from Nottingham 2 REC	Research Associate	Yes	
Mr Robert Johnson – co-opted from	Research Co-ordinator	Yes	
Mrs Sue Maguire	Head of Medicines Safety	Yes	
Mr Mike Newman	Consultant Gynaecologist	Yes	
Mr Michael Tawn	Solicitor	No	
Miss Alison Thorpe	Lay Research Technician	No	
Mr Ken Willis	Medical Devices Manager	Yes	

Also in attendance:

Name	*Position (or reason for attending)*
Miss Susie Cornick-Willis	Committee Co-ordinator

Trainee's Letter in Response to the Provisional Opinion Letter

Miss Nicola Buccheri
Trainee Clinical Psychologist
Leicestershire Partnership Trust
Department of Clinical Psychology
104 Regent Road
Leicester
LE1 7LT

14th March 2011

Mr Ken Willis
National Research Ethics Service
Leicestershire, Northamptonshire & Rutland Research Ethics Committee 2
The Old Chapel
Royal Standard Place
Nottingham
NG1 6FS

Dear Mr Willis,

Study Title: **Long-term Consequences of Gastric Bypass Surgery: A Qualitative Exploration of Patients Eating Patterns and Behaviours**

REC reference number: **11/EM/0025**

Following the Research Ethics Committee meeting held on the 17th February 2011, I am writing to provide the committee with the further information and clarification as requested. I hope that this letter and the enclosed updated consent form and participant information sheet answer your queries. Where the documents have been updated the text has been highlighted.

Further information or clarification required

1. In response to point 1 I would like to provide the following written confirmation detailing how the issue of embarrassment will be handling during the interviews:

   The Interviewer is a Clinical Psychologist doctoral student with very good clinical skills. This means that she is sensitive to people's emotional responses and able to react appropriately. If a participant were to appear distressed, she would clarify their concerns and offer to pause or stop the interview if they wish to. At the start of the interview all participants will be made aware that they are in control of what they say and that they do not have to answer a question if it makes them feel uncomfortable or embarrassed. Should a participant become embarrassed during the interview, the interviewer will remind them of their control in the process and say that it is okay if they do not wish to discuss that topic any further. In most cases participants appreciate the opportunity to discuss their experiences even if this may bring up some difficult feelings at the time. However, these benefits are not guaranteed. The interviewer will also ensure that once the interview has been completed the participant has the opportunity to discuss how they found it and share any feelings that they may have.

2. The recordings will be made on a digital recorder that the interviewer will keep safely on their person until files can be downloaded onto a password protected computer. This will be done, wherever possible, immediately after the interview has taken place. See the next point for further details of backups.

3. Data will be used and stored only on a password protected computer in a secure home environment. Once downloaded, the recordings will be deleted from the digital recorder. In addition, password protection will be applied to individual files for the transcriptions. As the recordings are transcribed any details that might reveal the identity of a participant will be removed. During transcription head phones will be used so that details of the interview are not overheard and confidentiality is maintained. Any transcription print-outs will be kept in a locked filing cabinet in a locked office in the researcher's home environment. Back-ups of computer files will be made after any updates, and will be stored in a locked filing cabinet at the University of Leicester (Clinical Psychology Section) along with print-outs of transcriptions.

4. See above. Routine back-ups of files will be made after any amendments and stored securely in a locked filing cabinet at the University of Leicester (Clinical Psychology Section).

5. Data will be stored for 5 years.

6. a) We appreciate the concern of the committee for the well-being of participants. We suggest that 'untoward' needs further definition for the sake of clarity to participants. Therefore, the Participant Information Sheet has been updated to state clearly when confidentiality will have to be broken. This will be if the participant discloses information that suggests that they are at risk of harm, or that they might act to put another at risk of harm.

   b) The Participant Information Sheet has been updated to state clearly that there are no guaranteed benefits of participating in this study.

   c) See section 3 above. The original recordings will be deleted from the recorder once it has been downloaded to a password protected PC and the file has been checked. This will mean that the file is not on the recorder when it is taken out for further interviews. The recordings will be deleted after 12 months once the data has been transcribed, analysed and reported. They will be stored for this long in case there is any need to refer to original recordings, but destroyed as soon as possible afterwards as the recording is the least 'anonymous' version of the data. The transcriptions will be stored for 5 years in locked storage in the Clinical Psychology Department at the University of Leicester in case further reference to them is required. Any data that could identify participants will be anonymised at transcription. The Participant Information Sheet has been updated to state clearly how and when the data will be destroyed.

   d) The opening comments of the Participant Information Sheet have been updated to state clearly that this research is a student project.

   e) The Participant Information Sheet has been updated to include the following contact details should a participant wish to complain: Dr Sheila Bonas, CPsychol, Clinical Psychology, University of Leicester, 104 Regent Road, Leicester, LE1 7LT. Tel: 0116 223 1648. Fax: 0116 223 1650

   f) The Participant Information Sheet has been updated to state clearly that should an individual not want to take part, or wish to withdraw from the study at any point, then they will not be contacted by the research team again.

   g) An additional section entitled 'Sources of Support' has been added to the Participant Information Sheet.

h) The Participant Information Sheet has been updated to state clearly that interviews will be audio recorded using a small digital recorder.

i) All re-submitted documents have been proof-read for typos and errors.

7. a) The consent form has been updated to include an additional point for participants to initial. It reads: 'I understand that confidentiality may have to be breached if I disclosed information that suggested that I or another person was at risk of harm'.

   b) Point one has been updated to refer to the new version number and date of the Participant Information Sheet.

Please do not hesitate to contact me should you require any further information or clarification.

Yours sincerely,

Nicola Buccheri
Trainee Clinical Psychologist

Copy to: Sponsor / R&D Department at Leicestershire Partnership Trust
R&D Department at University Hospitals of Leicester

Confirmation of Ethical Approval

NHS

National Research Ethics Service

Leicestershire, Northamptonshire & Rutland Research Ethics Committee 2

The Old Chapel
Royal Standard Place
Nottingham
NG1 6FS

Telephone: 0115 8839425
Facsimile: 0115 8839294

18 March 2011

Miss Nicola Buccheri
Trainee Clinical Psychologist
Leicestershire Partnership Trust
Department of Clinical Psychology
104 Regent Road
Leicester
LE1 7LT

Dear Miss Buccheri,

Study Title: **Long-term Consequences of Gastric Bypass Surgery: A Qualitative Exploration of Patients Eating Patterns and Behaviours**

REC reference number: **11/EM/0025**

Thank you for your letter of 14 March 2011, responding to the Committee's request for further information on the above research and submitting revised documentation.

The further information has been considered on behalf of the Committee by the Vice-Chair.

Confirmation of ethical opinion

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation as revised, subject to the conditions specified below.

Ethical review of research sites

The favourable opinion applies to all NHS sites taking part in the study, subject to management permission being obtained from the NHS/HSC R&D office prior to the start of the study (see "Conditions of the favourable opinion" below).

Conditions of the favourable opinion

The favourable opinion is subject to the following conditions being met prior to the start of the study.

Management permission or approval must be obtained from each host organisation prior to the start of the study at the site concerned.

For NHS research sites only, management permission for research ("R&D approval") should be obtained from the relevant care organisation(s) in accordance with NHS research governance arrangements. Guidance on applying for NHS permission for research is available in the Integrated Research Application System or at http://www.rdforum.nhs.uk.

Where the only involvement of the NHS organisation is as a Participant Identification Centre (PIC), management permission for research is not required but the R&D office should be notified of the study and agree to the organisation's involvement. Guidance on procedures for PICs is available in IRAS. Further advice should be sought from the R&D office where necessary.

Sponsors are not required to notify the Committee of approvals from host organisations.

It is the responsibility of the sponsor to ensure that all the conditions are complied with before the start of the study or its initiation at a particular site (as applicable).

Approved documents

The final list of documents reviewed and approved by the Committee is as follows:

Document	*Version*	*Date*
Protocol	4	26 January 2011
Letter of invitation to participant	1	31 January 2011
Response to Request for Further Information		14 March 2011
REC application	70697/184473/1/595	31 January 2011
CV - Academic Supervisor		
Reply slip	1	31 January 2011
Participant Information Sheet	2	14 March 2011
Interview Schedules/Topic Guides	1	31 January 2011
Investigator CV		31 January 2011
Participant Consent Form	2	14 March 2011
Internal Peer Review Form		16 November 2010

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees (July 2001) and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

After ethical review

Now that you have completed the application process please visit the National Research Ethics Service website > After Review

You are invited to give your view of the service that you have received from the National Research Ethics Service and the application procedure. If you wish to make your views known please use the feedback form available on the website.

The attached document *"After ethical review – guidance for researchers"* gives detailed guidance on reporting requirements for studies with a favourable opinion, including:

- Notifying substantial amendments
- Adding new sites and investigators
- Progress and safety reports
- Notifying the end of the study

The NRES website also provides guidance on these topics, which is updated in the light of changes in reporting requirements or procedures.

We would also like to inform you that we consult regularly with stakeholders to improve our service. If you would like to join our Reference Group please email referencegroup@nres.npsa.nhs.uk.

11/EM/0025	**Please quote this number on all correspondence**

With the Committee's best wishes for the success of this project

Yours sincerely

pp Chatrie

Mr Mike Newman
Vice Chair

Email: jessica.chatrie@nottspct.nhs.uk

Enclosures: "After ethical review – guidance for researchers"

Copy to: *Sponsor/R&D office for NHS care organisation at lead site - LPT*

Appendix M

Evidence of NHS Trust Approval Requirements

1. Evidence of Good Clinical Practice (GCP) in Research Training

2. Evidence of Consent Training

3. Letter of NHS Trust Approval

Evidence of Good Clinical Practice in Research Training

Assessment Certificate

Issued to

Nicola Buccheri

For completion of the University Hospitals of Leicester NHS Trust

Good Clinical Practice in Research

Training and Assessment on 13th April 2011

Authorised on behalf of the University Hospitals of Leicester

A.J.Thompson

Joanne Thompson

Valid until 12th April 2013

Evidence of Training in Taking Informed Consent

Consent Assessment Certificate

(University Hospitals of Leicester NHS Trust)

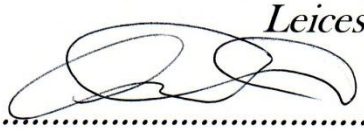
Issued to

Nicola Buccheri

For study:
Patients Eating Patterns and Behaviours After Gastric Bypass Surgery

UHL 11010
On
20th May 2011

Authorised on behalf of the University Hospitals of Leicester



.....

Lisa Wann

Letter of NHS Trust Approval

University Hospitals of Leicester NHS
NHS Trust

DIRECTORATE OF RESEARCH & DEVELOPMENT

Director: **Professor D Rowbotham**
Assistant Director: **Dr David Hetmanski**
R&D Manager: **Carolyn Maloney**

Research & Development Office
Leicester General Hospital
Gwendolen Road
Leicester
LE5 4PW

Direct Dial: (0116) 258 8351
Fax No: (0116) 258 4226

27/05/2011

Miss Nicola Buccheri
Department of Clinical Psychology
104 Regent Road
Leicester
LE1 7LT

Dear Miss Nicola Buccheri

Ref: UHL 11010
Title: Long-term Consequences of Gastric Bypass Surgery: A Qualitative Exploration of Patients Eating Patterns and Behaviours
Project Status: Project Approved
End Date: 27/04/2012

I am pleased to confirm that with effect from the date of this letter, the above study now has Trust Research & Development permission to commence at University Hospitals of Leicester NHS Trust.

All documents received by this office have been reviewed and form part of the approval. The documents received and approved are as follows:

Document Name	Version Number	Date
Protocol	4	26.01.11
Invitation Letter	1	31.01.11
Reply Slip	1	31.01.11
Interview Schedules/Topic Guides	1	31.01.11
PIS	2	14.03.11
CF	3	21.05.11

Please be aware that any changes to these documents after approval may constitute an amendment. The process of approval for amendments should be followed. Failure to do so may invalidate the approval of the study at this trust.

We are aware that undertaking research in the NHS comes with a range of regulatory responsibilities. Attached to this letter is a reminder of your responsibilities during the course of

Version 5 20.04.10

the research. Please ensure that you and the research team are familiar with and understand the roles and responsibilities both collectively and individually.

You are required to submit an annual progress report to the R&D Office and to the Research Ethics Committee. We will remind you when this is due.

The R&D Office is keen to support research, researchers and to facilitate approval. If you have any questions regarding this or other research you wish to undertake in the Trust, please contact this office.

We wish you every success with your research.

Yours sincerely

Dr David Hetmanski
R&D Assistant Director

Encs: .Researcher Information Sheet.

Please note that some of the documents may not apply to your study.

Appendix N

Chronology of Research Progress

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Time Frame	Activity
May 2010	• Submitted first draft of research proposal.
June 2010	• Attended an initial meeting to discuss research proposal draft.
July/August 2010	• Met with research supervisor. • Developed research ideas.
October 2010	• Submitted research proposal for peer review. • Consultation meeting with local clinicians to talk about their involvement in the project.
November 2010	• Finalised research proposal. • Developed the research tools (introductory letter, patient information sheet, consent form, interview schedule).
December 2010	• Worked on completing IRAS form and making links with local sponsor.
January 2011	• Submitted to Service User Reference Group (SURG) for feedback. • IRAS form submitted to the Research Ethics Committee (REC).

February 2011	• Received provisional opinion letter from the REC. • Applied for NHS Research and Development (R&D) approval.
March 2011	• Made amendments in response to REC's provisional opinion. • Received ethical approval from the REC on 18th March 2011.
April 2011	• Responded to queries from R&D office. • Obtained a certificate in Good Clinical Practice (GCP) in Research. • Started to develop review question and search strategy for the literature review.
May 2011	• Attended training in taking informed consent • Ran the first database search for the literature review • Received confirmation of R&D approval
June 2011	• Met with the Bariatric Surgery team to discuss commencing recruitment. • A total of 96 introductory letters were sent out to all patients who met the inclusion criteria.
July 2011	• Received 26 reply slips from potential participants. • Commenced interviewing, and iterative process involving transcriptions, coding and further interviews, on 22nd July 2011.

August 2011	• Completed a further four interviews, continued with the iterative process and arranged more interviews.
September 2011	• Completed a further five interviews, continued with the iterative process and arranged more interviews.
October 2011	• Completed a further four interviews, continued with the iterative process and arranged more interviews.
November 2011	• Completed a further three interviews and reached saturation. • Started to write up Introduction and Methods section for the research report.
December 2011	• Continued with analysis and theoretical integration, along with drafting pieces of the research report.
January 2012	• Completed theoretical integration and drafted results and discussion sections. • Re-ran literature review search strategies and finalised papers for inclusion.
February 2012	• Focus was primarily on the literature review during this month.
March 2012	• Drafted critical appraisal, appendices and part A of the thesis. • Re-ran the literature review search strategy to

	check all up-to-date papers had been included. • A complete draft was completed for review by the research supervisor on the 30th March 2012.
April 2012	• The focus of this month was on proof reading, making alteration and formatting the structure of the thesis. • Thesis Submitted on April 27th 2012.
FUTURE AIMS **May 2012**	• Send all participants a brief dissemination report of the research findings. • Meet with the local clinicians involved to discuss the findings and publication.
June – September 2012	• Prepare the paper for publication. • Go through the viva process, make amendments and re-submit. • Present findings at the trainee research conference.