University of Chester

Caring for women with raised BMIs during the childbirth continuum: Realities from practice

SEMINAR PRESENTATION

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Contents of Seminar

- Background to PhD study
- Conduction of the study
- Its Findings and Recommendations for Practice

Obesity Epidemic

- In 2000 the World Health Organisation (WHO, 2004) announced that more than 1 billion adults worldwide were overweight and 300 million of these obese; three times higher than figures in the 1980s, thus citing obesity as a global epidemic.
- In the UK it was reported in 2004 that over the previous 25 years there has been a 400% increase in obesity (House of Commons Health Committee, 2004).
- It was predicted by the *Foresight Report* in 2007 that by 2025 almost half of men and over a third of women would be obese (age range 21 to 60 years) and by 2050 at least 60% of men and 50% of women (Foresight, 2007).
- Startling predictions by the UK Health Forum, who are collaborating on the *World Health Organisation Modelling Obesity Project* would suggest that even this is a severe underestimation of obesity future projections for the UK. The study suggests that European countries will be facing an obesity crisis of gigantic proportions by 2030. Within the UK and Ireland, obesity levels are predicted to have the worst case scenarios (Nainggolan, 2015).
- Within the general population for women the rates of obesity are still rising, with the latest figures of obesity in women in England being 23.8%, a rise of 7.4% since 1993 (HSCIC, 2015).

Statistics for the Maternity population

- There were no figures on the obese maternity population across the UK until 2010, when CMACE (2010) published their audit results: **4.99%** of pregnant women with **BMI** ≥35 kg/m^2 **= 38, 478 maternities.**
- Previous research in Middlesborough and Liverpool indicated the figures in these areas to be **16 % to 17.7%** (Heslehurst et al. 2007; Kerrigan & Kingdon, 2010).
- Also, Heslehurst et al's study in 2007, did illustrate the rising figures in the North East, Middlesborough, which demonstrated that the rates of obesity in the pregnant population had doubled over a 15 year period, from **9% in 1990 to 16% in 2004.**
- It was estimated in the UK, that approximately **one in five** women of childbearing age is obese (Centre for Maternal and Child Enquiries and Royal College of Gynaecologists, 2010).

- **However, anecdotal evidence would suggest it is much higher!**

Causes of Obesity- its complex

- The fundamental cause of obesity is believed to be the energy – expenditure equation, eating more calories than is required and therefore expended, resulting in an increase of adipose tissue. Though this is being questioned?
- Obesogenic environment.
- Our diets are now composed of energy dense foods with high levels of fat and sugar.
- Comfort eating.
- A change of lifestyle.
- Pregnancy.
- Unable to exercise due to illness/injuries.
- Ignorance of what is considered a healthy diet.
- Eating disorder, such as compulsive overeating.
- Reached adulthood suffering from childhood obesity.

(Blundell, 2013;Mills, 2009; Sahota, 2011; Steen, 2009.)

How do we measure obesity?

Body Mass Index(BMI)

- BMI is defined as a persons weight in kilograms divided by the square of their height in metres (kg/m^2).
- It is the same for both sexes and is independent of age in adults (WHO 2006).
- Devised in 1972 and deemed applicable to all populations (Keys et al. 1972).
- Yet, in 2013 NICE suggested that a BMI score of $\geq$ 27.5 kg/m^2 rather than $\geq$30 kg/m^2 should be used to detect obesity for people of African, Caribbean and Asian descent.
- BMI is the way of measuring obesity in adults in the UK.

World Health Organisation classification of normal, overweight and obesity in adults according to Body Mass Index (BMI) (WHO, 2006).

	Principal cut-off points	Additional cut-off points
Normal range	**18.50 - 24.99**	18.50 - 22.99 23.00 - 24.99
Overweight	**≥25.00**	≥25.00
Pre-obese	**25.00 - 29.99**	25.00 - 27.49 27.50 - 29.99
Obese	**≥30.00**	≥30.00
Obese class I	**30.00 - 34.99**	30.00 – 32.49 32.50 – 34.99
Obese class II	**35.00 – 39.99**	35.00 – 37.49 37.50 – 39.99
Obese class III	**≥40.00**	≥40.00

Obesity epidemic brought to Maternity Care attention by:

- *The Confidential Enquiry into Maternal and Child Health* in 2007 brought the serious issue of maternal obesity to the public's attention by publishing the following findings: that 28% of all the women who died who had their BMI recorded, had BMIs of 30 or greater. It also, found that 30% of mothers who had a stillbirth or neonatal death were obese.

- *Centre for Maternal and Child Enquiries* (2010) published the findings from their 3 year UK wide Obesity in Pregnancy Project.
- This project involved: a national survey of maternity services for women with obesity; a national cohort study of 5068 women with maternal obesity, (BMI $\geq$35 kg/m^2) who gave birth in the UK during March and April 2009; a national clinical audit of maternity care received by 905 women with a BMI $\geq$35 kg/m^2.

Risks associated with BMI ≥35kg/m²

(CMACE, 2010)

	BMI ≥35kg/m2	General Maternity Population
Increased risk of C/S	37%	25%
Reduced spontaneous vaginal deliveries	55%	69%
Increased risk of perinatal mortality	8.6 stillbirths per 1000 singleton births	3.9 per 1000 singleton births
Singleton babies were late for gestational age	20%	10%
Incidence of PPH	38%	Approx 10%

The potential risks of becoming pregnant with a BMI of ≥30kg/m^2

Mother

- Hypertension
- Pre-eclampsia
- Thromboembolism
- Cardiac disease
- Gestational diabetes
- Pre-term labour
- Induced or prolonged labour
- Instrumental delivery
- Emergency caesarean section (C/S)
- Postpartum haemorrhage

Fetus

- Macrosomia
- Prematurity
- Hypoglycaemia
- Stillbirth
- Intrauterine death

Guidance arrived in 2010……

- NICE Guidance – Dietary interventions and physical activity interventions for weight management before, during and after pregnancy (NICE, 2010).

NHS
National Institute for Health and Clinical Excellence

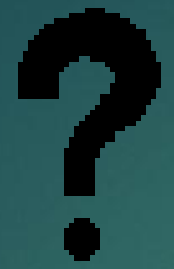
- Centre for Maternal and Child Enquiries and Royal College of Obstetricians and Gynaecologists Joint Guideline: Management of Women with Obesity in Pregnancy (CMACE/RCOG, 2010).

Research Question

- **What does it mean to midwives and student midwives on the point of qualification to care for women with BMIs ≥30kg/m² during the childbirth continuum?**

Methodological Considerations

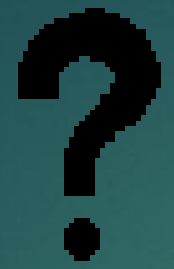
- Initial consideration - Heideggerian Phenomenology
- Chosen methodology - Interpretative Phenomenological Analysis (IPA)
- Interpretivist Paradigm
- Qualitative Approach

Why IPA 

- **Because**: I like it and I thought I could work with it!
- **Because**: I wrote an article on understanding this approach and grew to understand it myself.
- **Because**: when I started the research study there had not been a study published in a midwifery journal publication utilising this methodology.

- 'IPA researchers are especially interested in what happens when the everyday flow of lived experience takes on a particular significance for people'

(Smith et al, 2009, p1).

Why IPA 

- IPA was introduced and developed in the discipline of psychology by Professor Jonathan. A. Smith (Smith, 1996) and he has had numerous publications with colleagues detailing its development, processes and applications in Psychology.
- Developed as a research approach.
- Structured, yet flexible.
- Aims to discover meaning.

- 'It is congruent both with phenomenology and hermeneutics by being concerned with determining an understanding of 'what it is like from the point of view of the participants'

(Shinebourne, 2011, p21).

Conduction of the study: Part 1

- **Recruitment Criteria:** Midwives who had cared for women with BMIs of $\geq$30kg/m^2 either during the antenatal period, intrapartum or postnatal.
- **Recruitment :** Posters with attached invitation letters place in 4 North of England Hospital Trusts' Maternity Units.
- **Sampling:** Purposive.
- **Data Collection**: 16 Low structured one to one interviews, which were audio-taped with consent.
- **Setting**: own homes, University campuses and one hospital Trust.
- **Length of interviews**: 25 minutes to 60 minutes, guided by the process of saturation.

Conduction of the study: Part 2

- **Recruitment Criteria:** 3rd year Student Midwives who had cared for women with BMIs of $\geq$30kg/m^2 either during the antenatal period, intrapartum or postnatal.
- **Recruitment :** Sign placed on administrator's desk inviting 3rd year midwifery students to take an invitation to join the study.
- **Sampling:** Purposive.
- **Data Collection**: 8 Low structured one to one interviews, which were audio-taped with consent.
- **Setting**: University campus in North of England.
- **Length of interviews**: 35 minutes to 60 minutes, guided by the process of saturation.

Data Analysis for both parts 1 & 2: IPA

- Reflexivity.
- Manual analysis.
- NVivo utilised to add rigour and organise the data.
- Trustworthiness.

- Analysis commenced during the interview process, whereby the researcher is aiming to initiate and attach meaning to what is being said by the participant.
- The audio-taped interviews were transcribed and the researcher then engaged with the interview transcripts to realise themes and to ultimately achieve an interpretation of the experiences.
- Any interpretation of the data is based solely on what the participants have expressed in their interviews, and the role of the researcher is to endeavour 'to make sense of the participant trying to make sense of what is happening to them' (Smith et al. 2009, p 3).

Part 1 Findings: 21 Themes

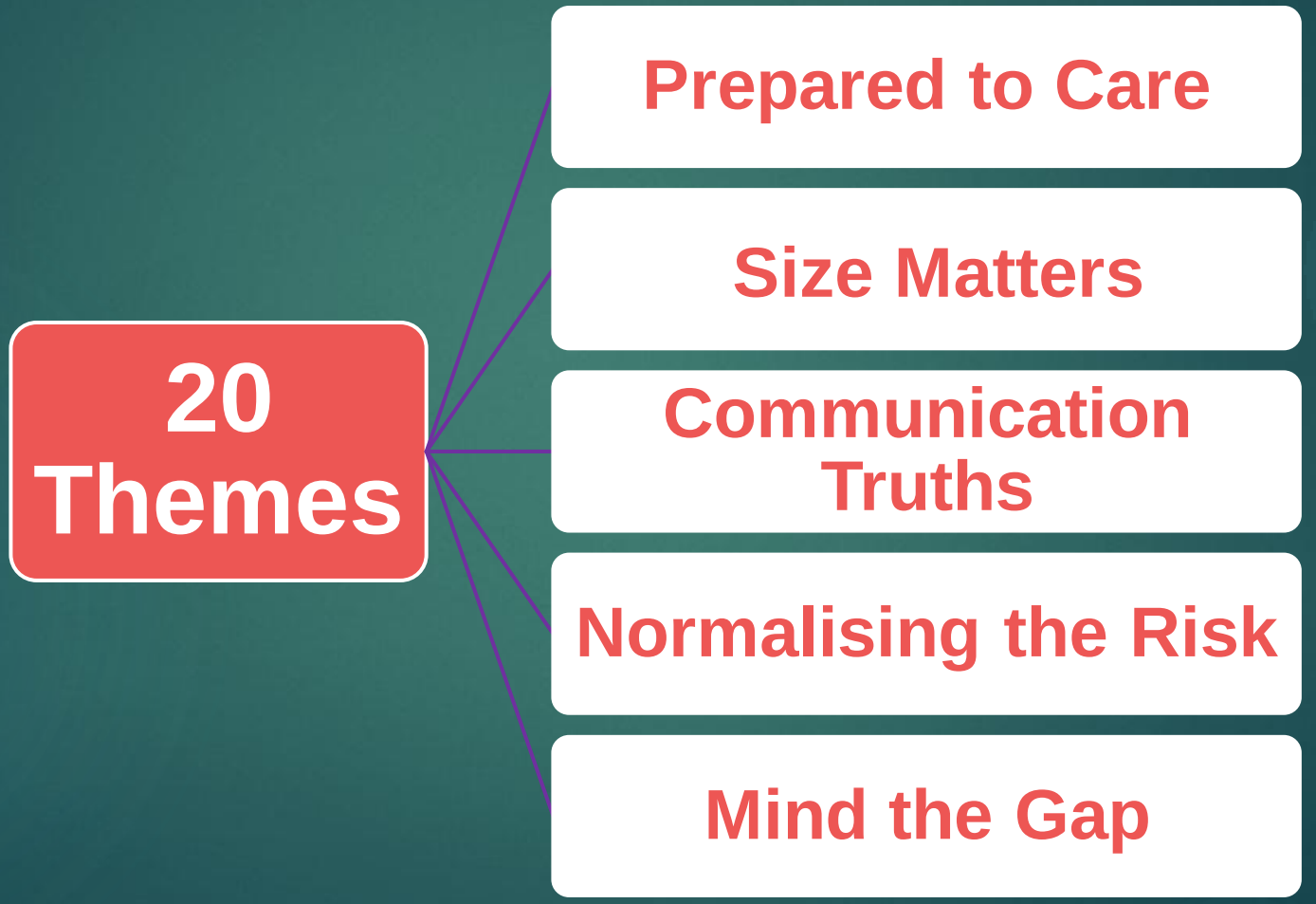
- Associated risks
  - Apologetic, vulnerable and embarrassed women
- Communicating risks
  - Hard work
- Health promotion
  - Homebirth
- Ideas for improving the service
  - Impact on care
- Issues of communication
  - Judgements
- Midwives' anxieties
  - Midwives' frustrations
- Midwives' concern & care for the women
  - Negative impact on resources
- Promoting normality against the odds
  - Raised BMIs are the norm
- Seeing beyond obesity
  - Size of midwife
- Strategies for communication
  - Women are offended by communication/care
- Women unaware of the implications for their size

Part 1 Findings: 5 Super-Arching Themes

Part 2 Findings: 20 Themes

- Caring
  - Challenges of delivering care
- Educationally feels prepared to care for this client group
  - Judgements
- Medicalised & high risk
  - Practice experience
- Promotes normality
  - Raised BMIs are the norm
- Seeing beyond obesity
  - Sensitive communication
- Size of student midwife & midwife
  - Size of woman
- Students do not have ‘sinking feeling’
  - Students’ perception of midwives role regarding communication issues with women with raised BMIs
- Students’ reluctance to express knowledge for fear of upsetting or showing up mentors
  - Suggestions for further training for midwives in caring for this client group
- Suggestions for further training for student midwives in caring for this client group
  - Suggestions for service improvements
- Truthful communication
  - Women’s awareness & lack awareness of their size

Part 2 Findings: 5 Super-Arching Themes



Quotes from Part 1Participants

- *If you're over a BMI of 35 then you're gonna need continuous monitoring and if you stand up that's really difficult and I always find myself kneeling at the side holding onto the monitor trying to prevent them having a fetal scalp electrode which is invasive. So that takes me away from doing other things and I can find myself getting a little bit hot and bothered if I'm trying to keep a good trace on a C.T.G. and think about caring for the lady and think about documenting in my notes. I find that…I always find that a big struggle.*
- *You don't know what you're feeling because it's just all mass and you, you know, all the elements of the examination are hard so palpation you're thinking is that a head, is that a head, is that head…I said right I'm just going to get a monitor, 'cause I couldn't hear anything with a sonicaid…I thought I'll get a monitor, it's got a bigger transducer. So as I went out the room to get that, I came back in and she was clearly pushing and I was thinking (sharp intake of breath) what's she gonna deliver here? Is it breech…what's happening? You know, I didn't have any idea about…I couldn't get a heart rate or nothing and she just delivered this baby and it was fine but you know, for like the 3 or 4 minutes that that was going on I had my heart in my mouth thinking by the grace of God make this be OK.*

Quotes from Part 1Participants

- *So to get this lady in the bed to push the bed into theatre we had like nearly 8 members of staff to make sure that the staff weren't getting hurt and again the lady was very conscious that it took so many people to do that little thing for her.*
- *I don't think you should judge people and I think in our job, I mean I've never judged anybody, you know, people are people. It doesn't really matter. They come in…people come in all shapes and sizes, pregnant or not and it's the person not the size and I know we put a lot of store by whether someone has a raised BMI or not but I don't think you should get hung up on that little bit. It's the whole person you that you should be looking after and that's just one aspect of their care.*
- *If you've got a lady with a really big BMI, when you get a normal delivery you do feel…it's joyous!*

Quotes from Part 2 Participants

- *I wouldn't say it's harder it's just more…it keeps you on your toes sort of thing. You just need to be that extra more vigilant.*
- *Every time I've looked after a lady with a large BMI the midwife has sort of said to me oh, I'm glad I've got you, like it'd be hard work on my own.*
- *Well I've had women say to me is it…is it because I'm fat? And as a student I said no, no, it's just the way baby's lying. I've tried to cover it up and maybe that's the wrong thing to do but I don't like for them to think that, especially when they're in labour you don't want them thinking negative thoughts.*
- *I feel quiet passionately about how medicalised midwifery has become and I know we can't go back from that now, you know, because of the clientele that we're looking after but I think our fundamentals of promoting normality and you know, keeping your lights low and creating a nice environment for her, they're like the foundations, the starting point of it. I'll still do that for everybody that I can.*
- *Cause you think a lot of our women have got an increased BMI so perhaps that needs to be included in the midwives kind of ongoing professional training which it isn't and I think it is the awkwardness of the midwives. So as much as we'd have training in University, we wouldn't learn that skill of how to actually deal with the women.*
- *I find it quite upsetting sometimes that they do feel like that and I feel it's important as midwives, as student midwives to not judge them and give them the best support and advice that you can.*

New Module developed from the findings

- MW 7024 **Managing Obesity during the Childbirth Continuum**
- It is a bespoke module specially developed to cover the spectrum of care for women with BMIs $\geq$30kg/m^2 throughout the childbirth continuum. Provide midwifery practitioners with singular knowledge on the pathophysiology of obesity, and its aetiology and epidemiology within a global, national and economic context.
- Provide practitioners with expert knowledge to enable them to critically apply management strategies in the field of maternity care for this client group.
- Its intention is to guide practitioners in developing sophisticated communication pathways by studying the psychology of obesity, and in helping to demonstrate a critical understanding and knowledge of the dietary factors and weight management strategies applicable to this client group.

A few of the Recommendations for Practice

- Further training & education for midwives to include focused communication skills training.
- To inform women during antenatal care of the potential difficulties they may encounter in care delivery e.g. the midwife trying to listen to the fetal heart rate. This would effectively reduce awkward and complex communications that can evolve for both the midwives and student midwives during these encounters.
- For it to be accepted procedure that a midwife would require the assistance of another person to assist them in caring for women with raised BMIs that require continuous fetal heart rate monitoring during intrapartum care.
- Public Health Campaign.


THANK
YOU

Further information on Research Methodology written by Taniya Roberts
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- **Book:**
- Co-authored: *The Handbook of Midwifery Research* (Steen, M; & Roberts, T. 2011)

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