

What helps or hinders midwives to implement physical activity guidelines for obese pregnant women?

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Guidelines

- **CEMACE/RCOG 2010:**
'Women should be made aware of the importance of healthy eating and appropriate exercise during pregnancy.....
- **NICE 2010:** Role of all Health Professionals- advise and support women.
- Recommend 30 mins moderate activity per day
- Importance of not being sedentary



CEMACE/RCOG Joint Guideline

Management of Women with Obesity in Pregnancy

March 2010

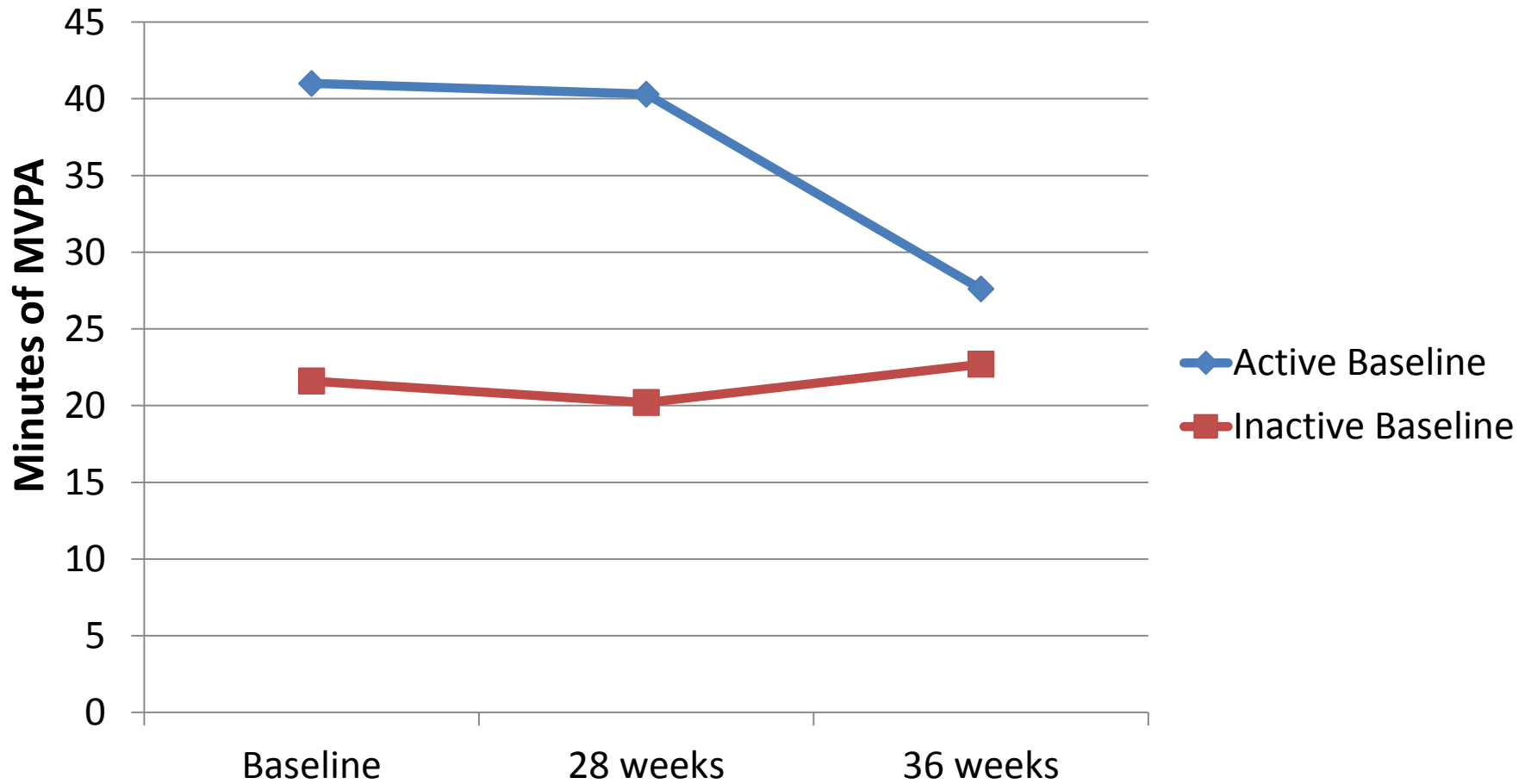

National Institute for
Health and Clinical Excellence

Issue Date: July 2010

Dietary interventions and physical activity interventions for weight management before, during and after pregnancy

NICE public health guidance 27

Change in MVPA according to activity at baseline



Barriers to increasing PA

**Inappropriate
advice, lacks clarity
and consistency**

**Concerns
about safety**

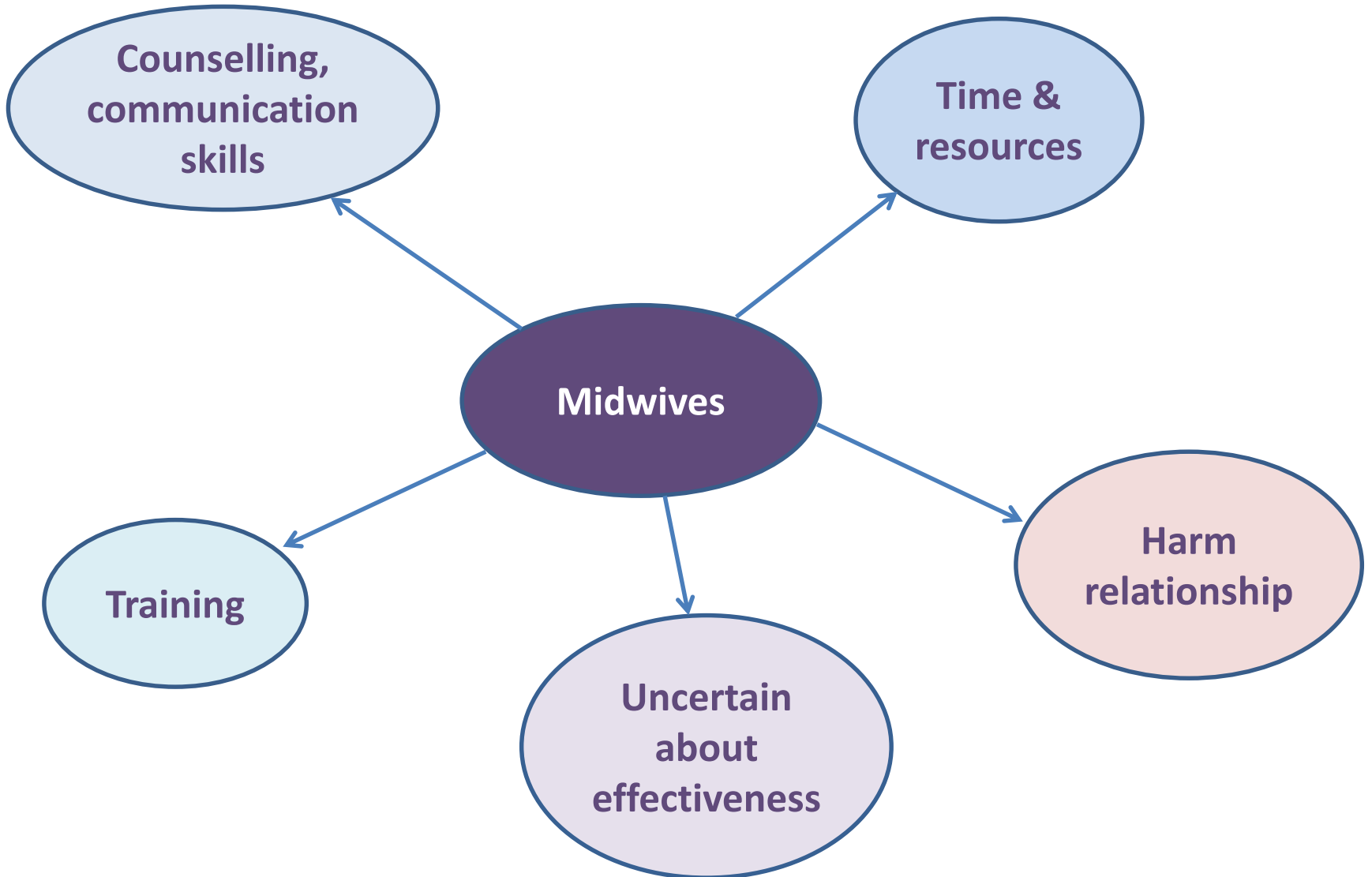
**Discomfort
Fatigue
nausea**

**Lack of social
support, family,
friends, health care
professionals**

**Unaware of benefits
of being active and
risks of inactivity**

**Low motivation
Embarrassed
Low self efficacy
misconceptions &
myths**

Views and experiences



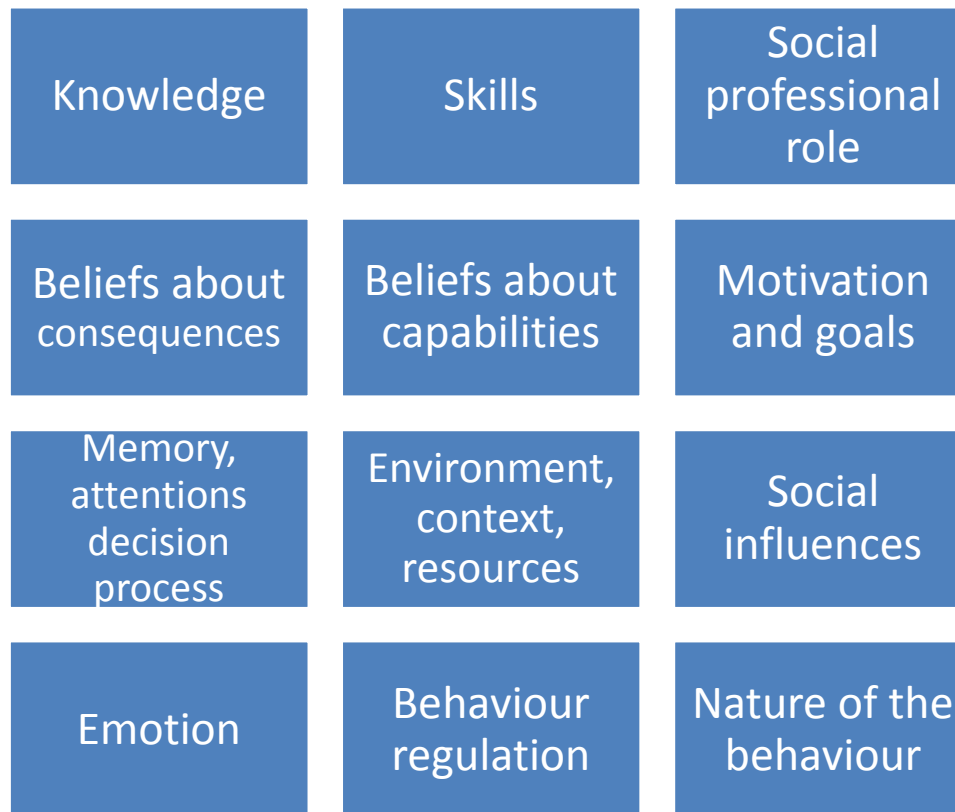
Aims



To investigate the barriers and facilitators to physical activity guideline implementation for midwives when advising obese pregnant women.

Theoretical Domains Framework

Theoretical, psychological framework which can be used to study implementation of guidelines and help to develop theory based interventions.



Michie *et al* 2005

Method

- Cross Sectional
- Quantitative
- Self Completion
- Anonymous
- All midwives working at RVI, S. Tyneside, North of Tyne PCT

QUESTION: *Do midwives discuss PA with obese pregnant women and advise them accordingly?*



The questionnaire

- Evidence from systematic reviews and guidelines to inform topic area.
- Existing qualitative research literature to design questions
- 40 questions (3-5 relating to each domain)
- PLUS direct question about the behaviour
- 5 point Likert scale
- Demographic/free text

Midwives Knowledge, Views and Beliefs about physical activity during pregnancy

Private and confidential

To what extent do you agree or disagree with these statements, please tick one option per question

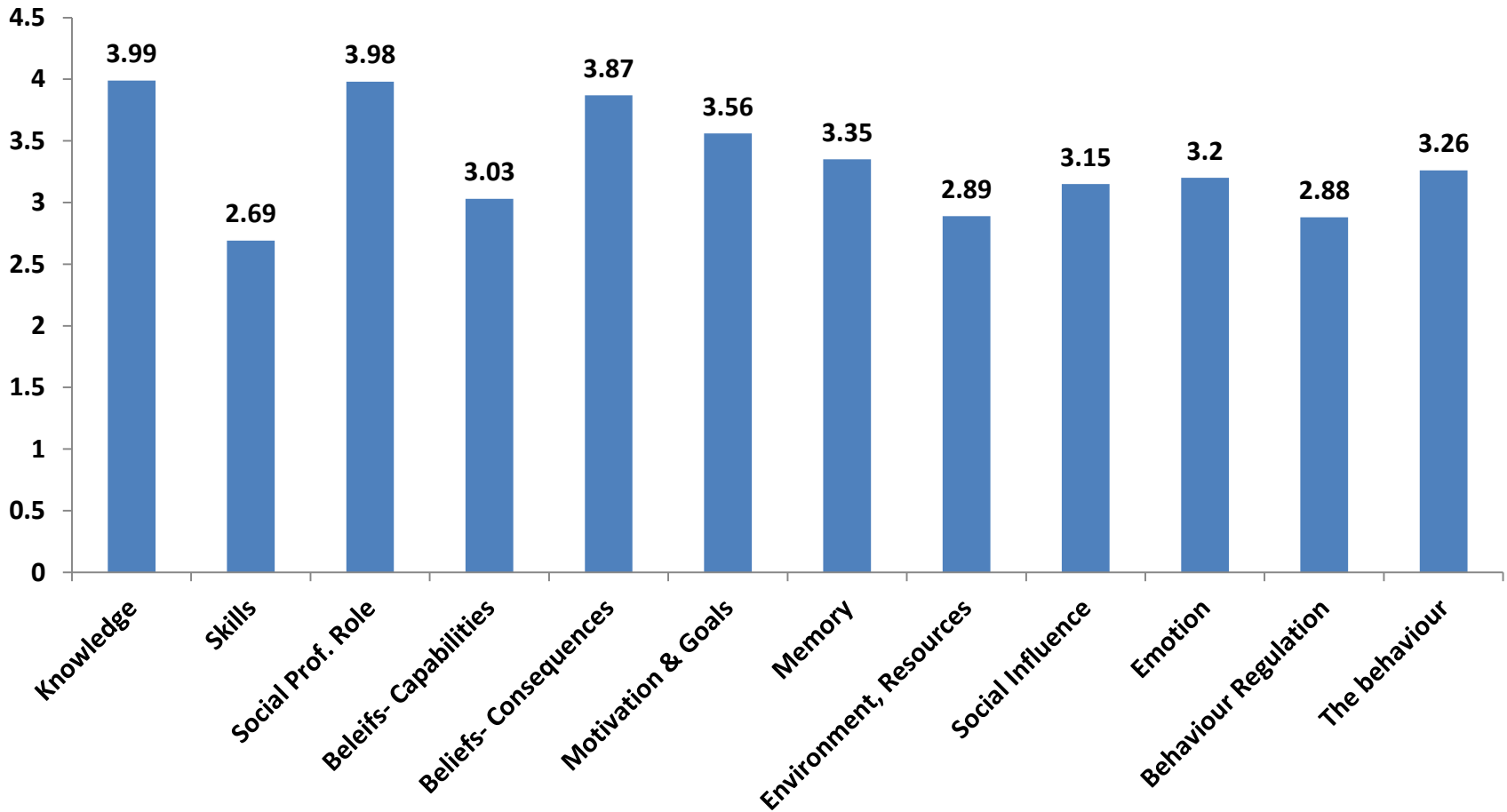
	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
1. It is acceptable for obese pregnant women who find physical activity difficult to rest and remain more sedentary during pregnancy.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. If I encounter a problem when discussing physical activity with obese pregnant women I know how to solve it.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. GPs expect me to discuss physical activity with obese pregnant women	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I feel competent discussing activity levels with obese pregnant women.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. I find it easy to discuss activity levels with obese pregnant women.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I worry about making obese pregnant women anxious by advising and encouraging them to be more active.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. It is beneficial for obese women to increase their physical activity levels during pregnancy as it will reduce their risk of getting gestational diabetes.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. It is safe for obese pregnant women to follow the recommendations of at least 30 minutes of moderate intensity activity per day.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. I am keen to implement the guidelines regarding physical activity for obese pregnant women.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Obese pregnant women expect me to discuss physical activity with them during pregnancy.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. I am usually too busy to discuss physical activity with obese pregnant women.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. I feel confident giving obese pregnant women advice about physical activity during pregnancy.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. I know when to discuss physical activity with obese pregnant women.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Results

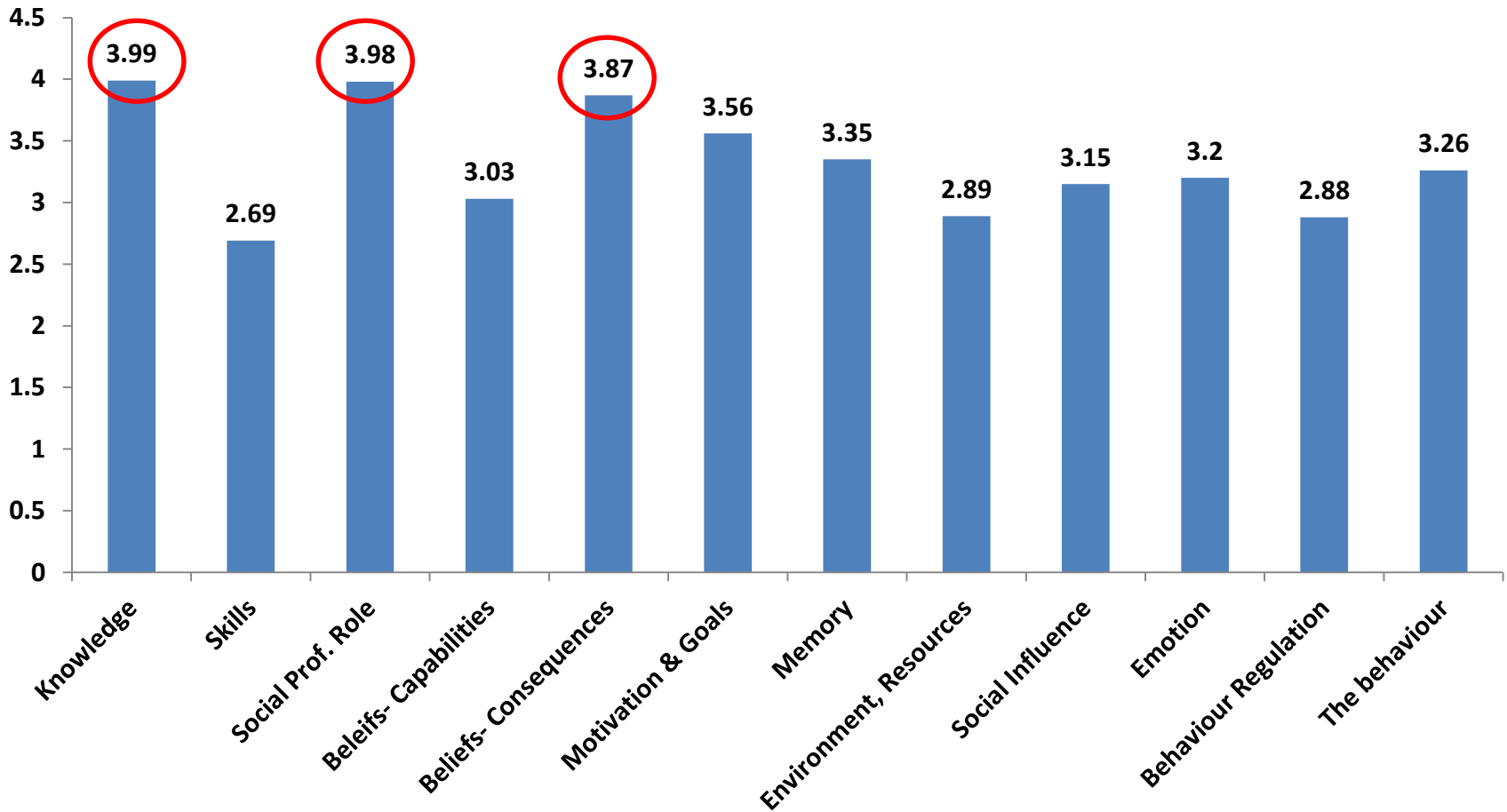
Participant characteristics

	All	Newcastle	South Tyneside	North of Tyne
Number issued	365	258	77	30
Number returned	192 (52.6%)	111 (43.0%)	51 (66.2%)	30 (100%)
Years Qualified				
<2	17 (8.8%)	11 (9.9%)	6 (11.8%)	0
3-5	22 (11.4%)	15 (13.5%)	7 (13.7%)	0
5-10	32 (16.7%)	19 (17.1%)	10 (19.6%)	3 (10.0%)
>10	121 (63.0%)	66 (59.4%)	28 (54.9%)	27 (90.0%)

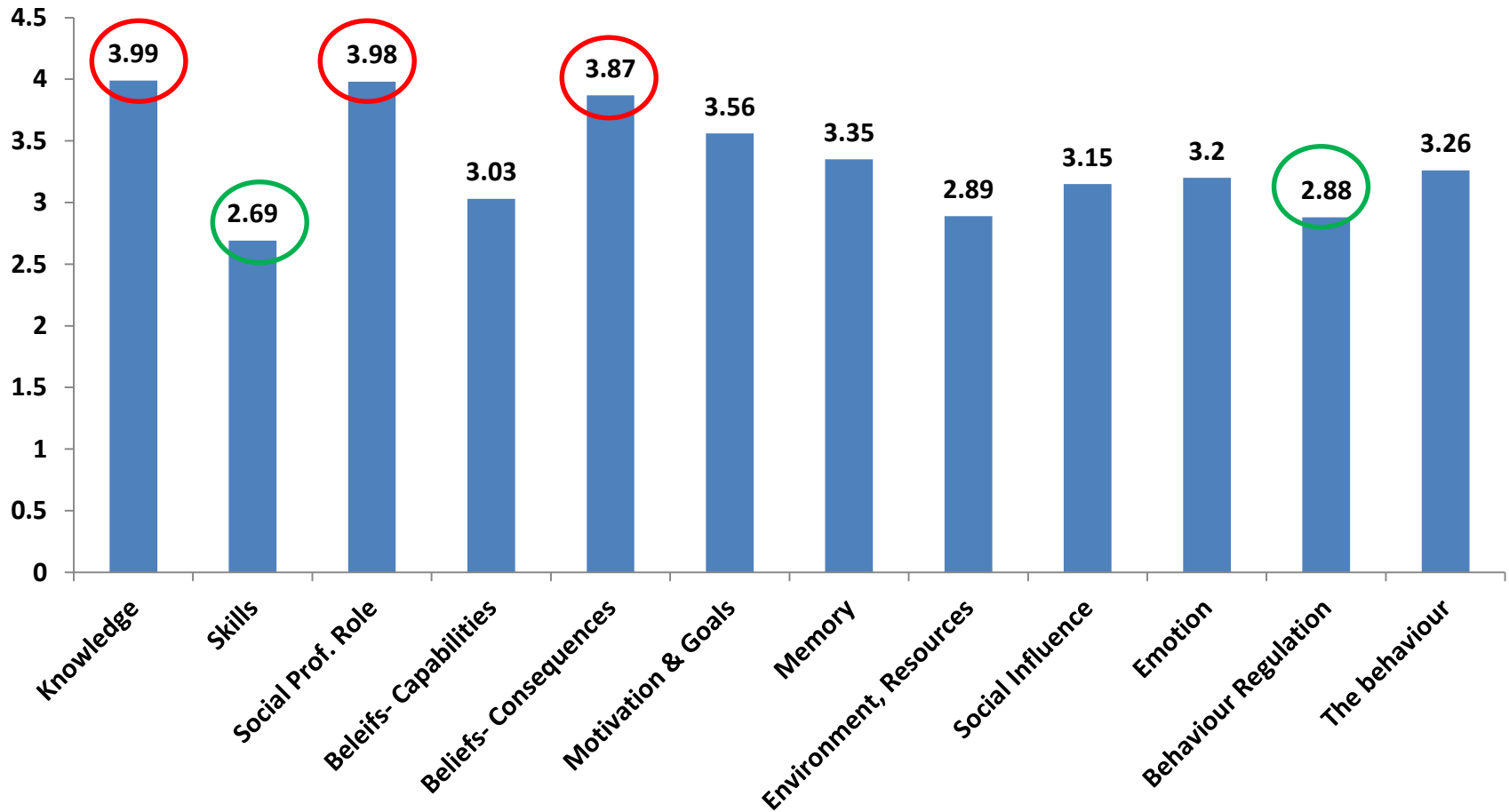
Domain scores, all respondents



Domain scores, all respondents



Domain scores, all respondents



Facilitators and Barriers

Midwives perceive/believe that:

- Part of role
- They have necessary experience
- Theoretical/practical understanding
- Behaviour expected of them and peers
- Optimistic that their advice will have appropriate outcomes
- Do not have ability, proficiency, competence
- Low self belief, esteem and confidence about effectiveness
- Don't plan or prioritise the discussion
- Not a specific goal

Influence of demographic factors

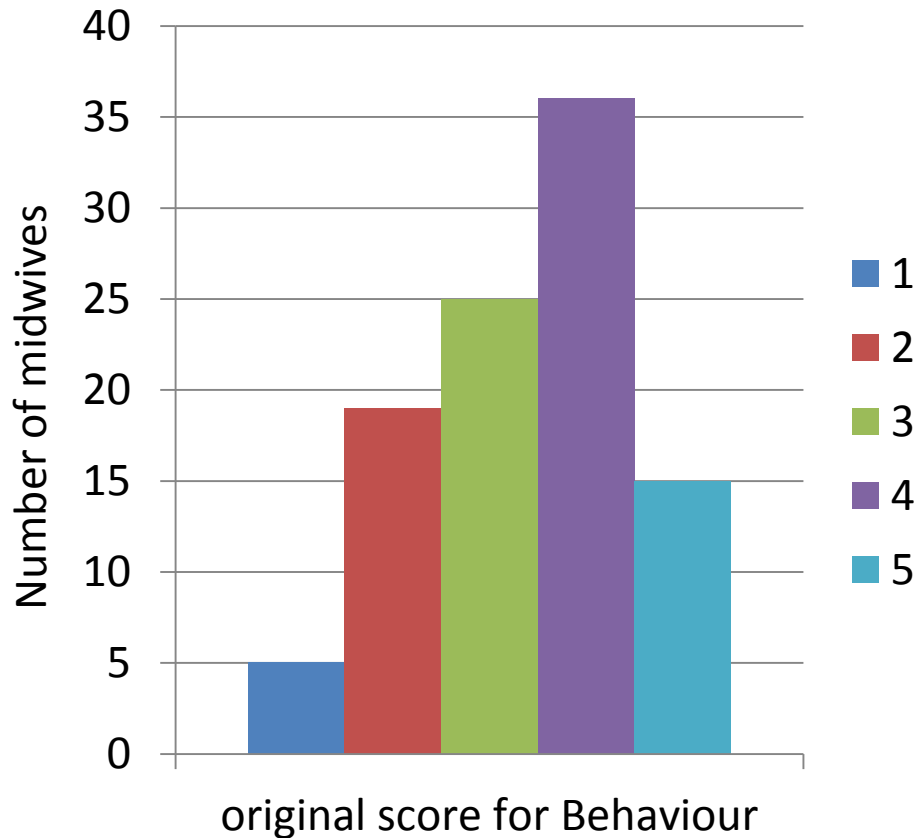
- No difference between 2 hospital trusts.
- North of Tyne community midwives scored higher on several domains and the Behaviour
- Staff caring for ante-natal women score higher for all domains except knowledge and social professional role
- Midwives working in different areas face different barriers and facilitators



Regression model

'I discuss physical activity with obese pregnant women and advise them in accordance with national guidelines'

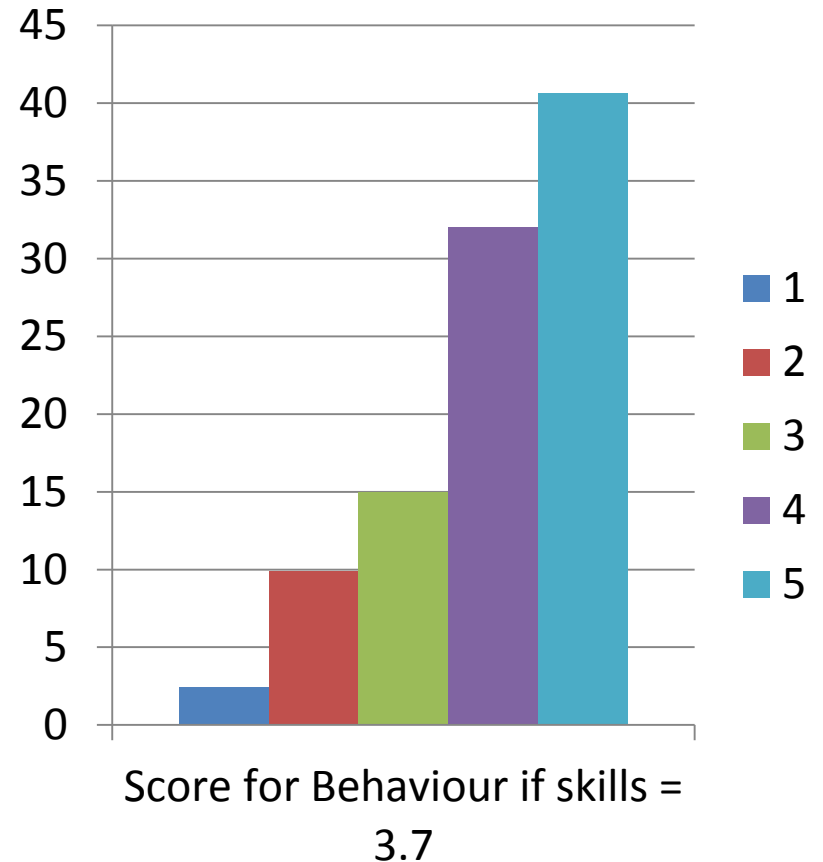
never	occasionally	sometimes	usually	always
1	2	3	4	5



Increase skills domain mean by 1

'I discuss physical activity with obese pregnant women and advise them in accordance with national guidelines'

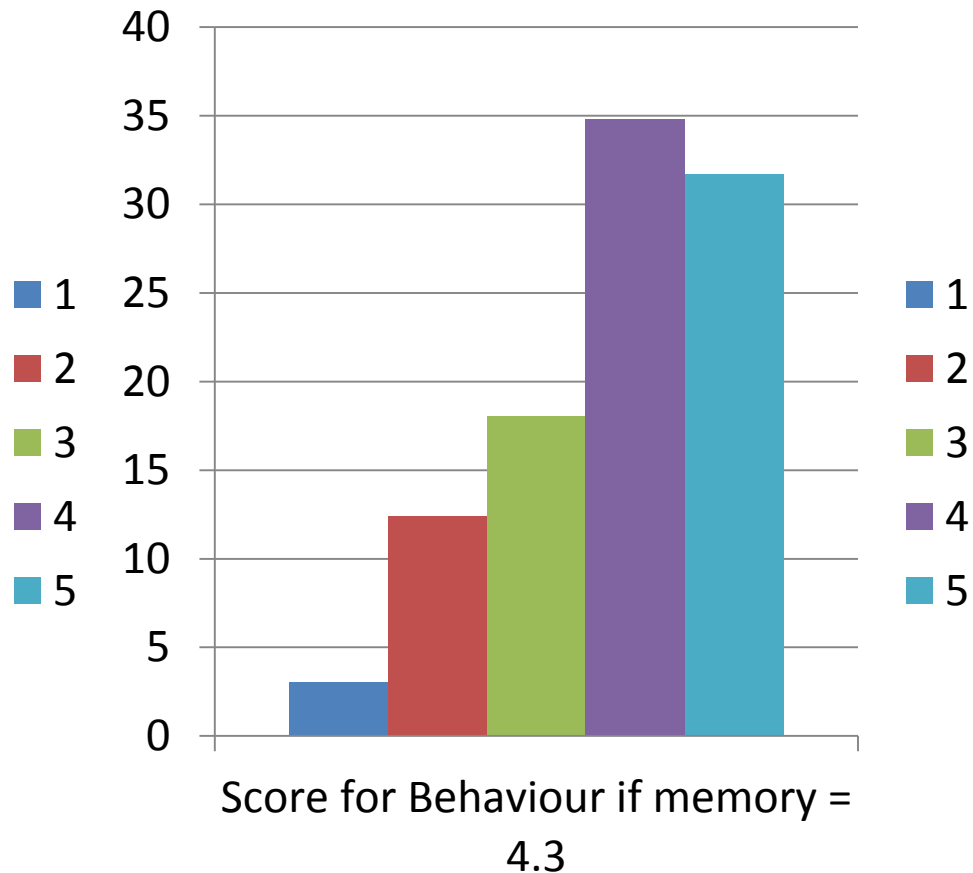
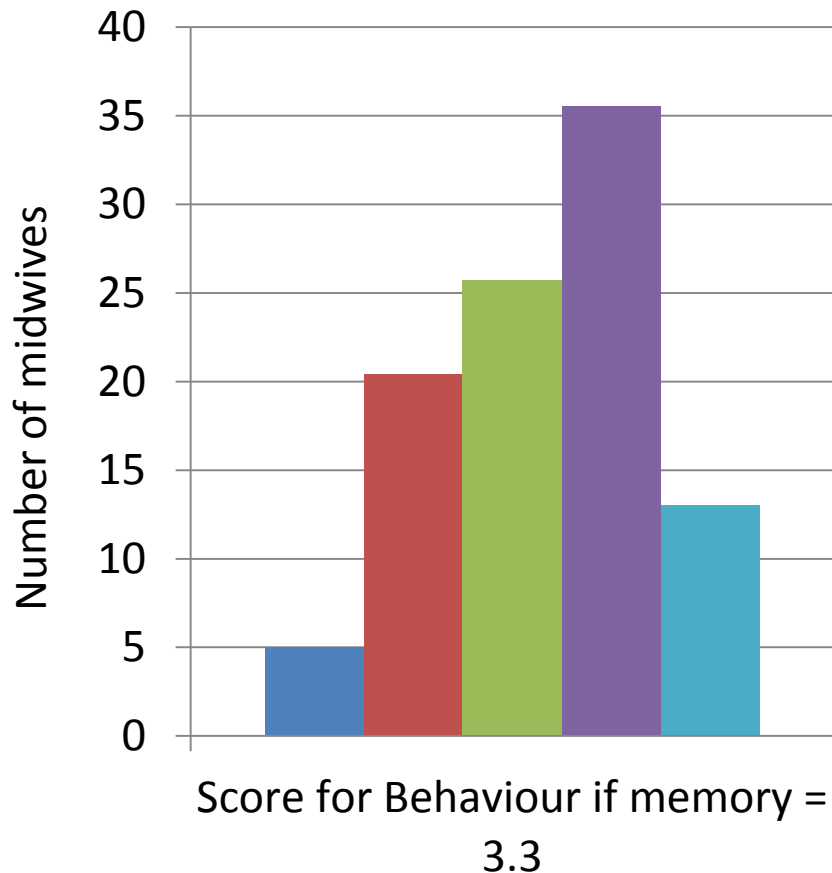
never	occasionally	sometimes	usually	always
1	2	3	4	5



Increase memory/attention/decision

'I discuss physical activity with obese pregnant women and advise them in accordance with national guidelines'

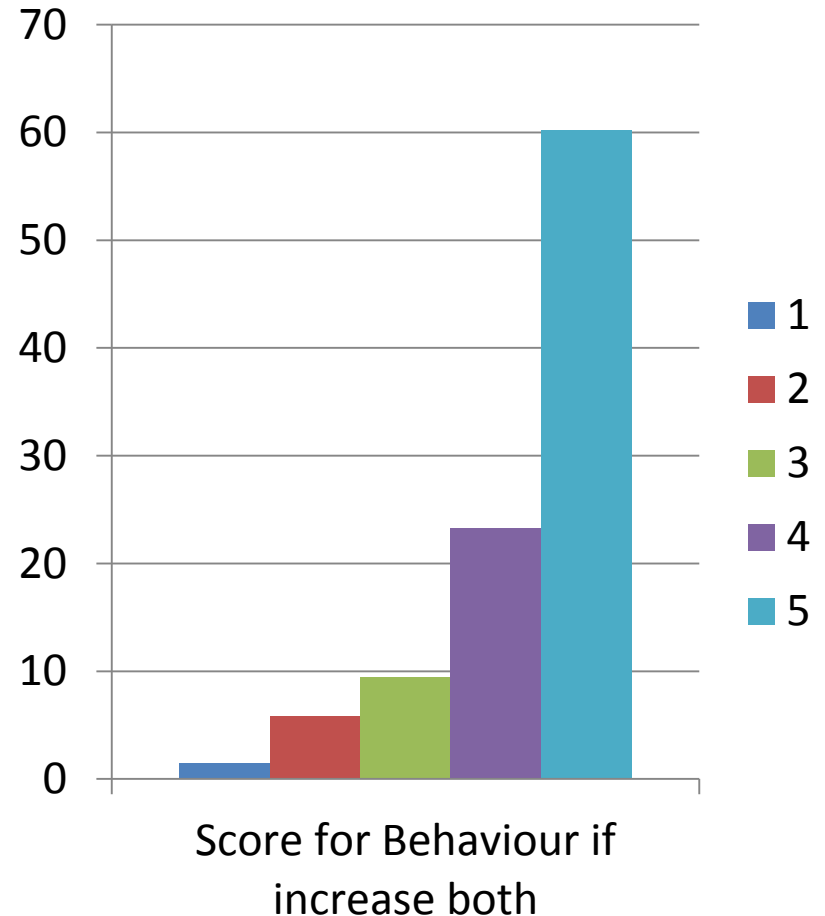
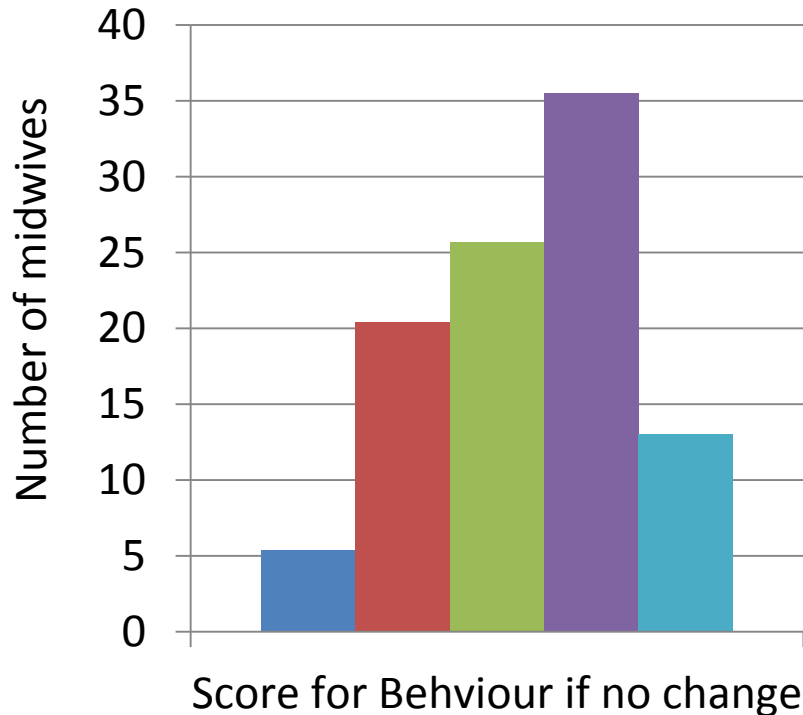
never	occasionally	sometimes	usually	always
1	2	3	4	5



Increase both

'I discuss physical activity with obese pregnant women and advise them in accordance with national guidelines'

never	occasionally	sometimes	usually	always
1	2	3	4	5



Behaviour change techniques

Domain	Behaviour change techniques	Domain	Behaviour change techniques
Skills	Goal/target Monitoring Rewards, incentives Graded tasks Problem solving, decision making, goal setting Rehearsal of skills Modelling, demonstration of behaviour Homework Perform behaviour in different settings	Memory, attention, decision process	Self monitoring Planning Implementation Prompts, triggers, cues

Midwives comments



- Coded using TDF - Facilitators and barriers for each domain-score
- Social professional role high on both
- Environment/context/resource low on both
- Discrepancy with knowledge and skills

Should be given to all women, plus healthy eating. It's no good going for a walk or a swim and then eating a Greggs pasty!

It is an integral part of my role as a practitioner to give health related advice

Because of the time limitations other aspects of care do take priority

As it is a worsening problem, it should be given greater attention, time and resources.

Key findings



- The midwives know what they should be advising and believe it is part of their role but have problems with skills, capabilities and resources.
- Skills and memory/attention/decision domains had a significant influence on the 'Behaviour'
- Interventions aimed at increasing implementation of the guidelines need to focus on the constructs within these domains to achieve behaviour change.



Implications for clinical practice

- ***Midwives:*** training, resources, consider routine enquiry, prioritise discussion
- Responsibility of all health care professionals
- Does it improve health outcomes in short and long term for mother and baby?



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(McParlin, C. et al, Midwifery, [2016]

<http://dx.dor.org/10.1016/j.midw.2016.09.015>)