

Psychosocial aspects of pregnancy & the role of lifestyle

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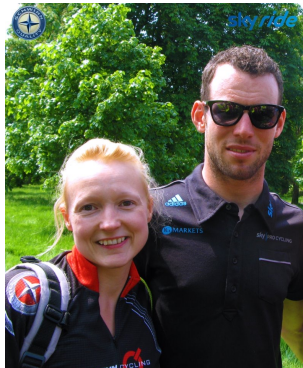
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Introductions



- MSc Health Psychology
- PhD – “A multi-perspective exploration of engagement in weight management behaviours and services during and after pregnancy”
- Lecturer & Applied Health Researcher since 2008
- Research specialisms include: Maternal health behaviour & behaviour change, Physical activity in people living with chronic conditions, Parental engagement with childhood obesity, Intervention development & evaluation
- Head of Research for EXI – digital exercise prescription for people living with long term health conditions (www.exi.life)
- 20+ years working in the fitness industry as Advanced Instructor – Physical Activity & Exercise
- Certified Pre- & Post-natal Instructor
- Lead Master Instructor and International presenter – Schwinn Cycling, Core Health & Fitness
- Founding member of RISE (empowering every woman to reach her full potential)
- Scientific Advisory Board member for charity: Active Pregnancy Foundation
- Technical advisor for European Register of Exercise Professionals
- Huge sports fan & exercise devotee since 1997
- Passionate about non-sedentary learning & working environments

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Advantages of less sedentary learning environments

- Research evidence demonstrates a positive effect of physical activity on brain function (Colcombe et al., 2006, Vaynman & Gomez-Pinilla, 2006)
- Standard lecture formats have been shown to induce a ‘vigilance decrement’ which can have an adverse effect on learning of the material being presented (Young, Robinson & Alberts, 2009).
- Research in schools demonstrates significant positive impacts on attention (on-task behaviour) and academic achievement (e.g. Donnelly & Lambourne, 2011, Howie et al., 2014)

Advantages of less sedentary learning environments

- Suggested mechanisms include:
 - Increased oxygen & glucose supply to the brain
 - Neurogenesis
 - Changes in brain chemistry, e.g. endorphins
 - Improvements in overall health & physical function
- Options
 - Standing (or moving) while watching
 - Energiser breaks

If you haven't tried it before, give it a go & tell me what you think

Learning outcomes

At the end of this session you will be able to:

- Describe psychosocial changes related to pregnancy
- Describe the main barriers to participation in prenatal physical activity and exercise
- Describe signs of depression and anxiety in pregnant women
- Describe other aspects of healthy lifestyle related to pregnancy (e.g., use of tobacco, alcohol and caffeine, sleep and rest patterns, avoiding stress)

How does pregnancy affect the individual?



Changes in pregnancy

Physical

Weight gain, body shape, functional limitations, fatigue, nausea, fetal movements, etc.

- Loss of control
- Doesn't fit the socially constructed ideal of the female body
- Incongruence of the physical manifestation of the mothering role to their other roles as a romantic partner, or working woman – need to protect their body image satisfaction
- High levels of body dissatisfaction in the postpartum period

(Hodgkinson, Smith, & Wittkowski, 2014)

Changes in pregnancy

Identity

Mother or pregnant woman

- Conflict with other roles, e.g. working woman, partner, daughter, friend, etc. (Hodgkinson, Smith & Wittkowski, 2014)
- Shift from public world to local world (Smith, 1999)
- Adopting the behaviours of a pregnant woman may help with acceptance of the new identity (Atkinson, Shaw & French, 2016)

Changes in pregnancy

Practical

- Reduction in income
- Reduced ability for everyday activities

Changes in pregnancy

Social

Cultural/social norms & practices

- Confinement

Ranging from general encouragement to rest, to prescriptive practices around food, activity & hygiene

- Surveillance

‘Surveillance medicine’ has decreased risks and can be comforting to parents, but may also be associated with increased anxiety/worry and medicalisation of pregnancy

Pregnant women often report feeling observed and/or judged, both by people they know/are close to, and strangers.

PA participation in pregnancy

What influences whether pregnant individuals are active?



Pregnant women report multiple barriers to exercise, including:

Intrapersonal

- Fatigue
- Pregnancy symptoms/discomforts
- Concerns about safety/knowledge of suitable activities
- Time
- Motivation – maternal & fetal health, weight management, focus on postnatal
- Confidence/exercise habit or identity

Interpersonal

- Support of partner, friends, family
- Advice from professionals
- Social norms/peers/cultural practices
- Work & caring commitments

Environmental

- Access to facilities/resources
- Weather
- Pregnancy-specific programmes

(Harrison, et al., 2018; Flannery, et al., 2018; Coll, et al., 2017)

Systematic review of social influence on PA in pregnancy (social support)

50 qualitative studies reviewed

Groups of people	Total
Health Professionals	128
Dependents	81
Family	72
Partner	52
Information sources	39
Exercise companion	39
People	37
Gym & Exercise Professionals	30
Friends	30
Pregnant women	17
Work colleagues	10
Culture	9
Family-in-law	5
Self influence	3
Significant other [non specific]	1

- 'Health professionals' most referenced group, then 'Dependents' (unborn baby & children), 'Family' (maternal family), then 'Partner'
 - proximity to pregnant woman
 - (comparative) investment in pregnancy
 - 'Information sources', 'Exercise companion' & 'Gym & Exercise Professionals'
 - utility of others with perceived expertise to enable PA behaviour
 - 'Non-exercising Friends', 'other Pregnant women', 'Work colleagues' have less influence
- BUT
- 'People' (acquaintances, strangers, public) above many others
 - significant influence of societal opinion

What should we do to support PA in pregnancy?

Capability

- What to do & how to do it – safely
- Tools to improve behavioural regulation, e.g. prompts, plans
- Simple, adaptable activities

Motivation

- Benefits for baby
- Address myths
- Enjoyable activities, focus on wellbeing

Opportunity

- Practical support
- Social support



Source: The behaviour change wheel: A new method for characterising and designing behaviour change interventions
Susan Michie, Maartje M van Stralen and Robert West



Energiser break



Other
lifestyle
factors in
pregnancy



Lifestyle in pregnancy

- Local guidance may vary
- There are often cultural & social norms associated with these behaviours
- Important not to stigmatise behaviours, especially those that are very hard to modify
- Refer to specialist services where available

Substances

Tobacco

- Universal agreement that smoking in pregnancy increases health risks for mother and baby
- Everyone should be supported to reduce or quit

Caffeine

- Current international guidance is that women can safely consume up to 200mg of caffeine daily
- A caffeine calculator can help to track intake e.g. <https://www.tommys.org/pregnancy-information/calculators-tools-resources/check-your-caffeine-intake-pregnancy>

Substances

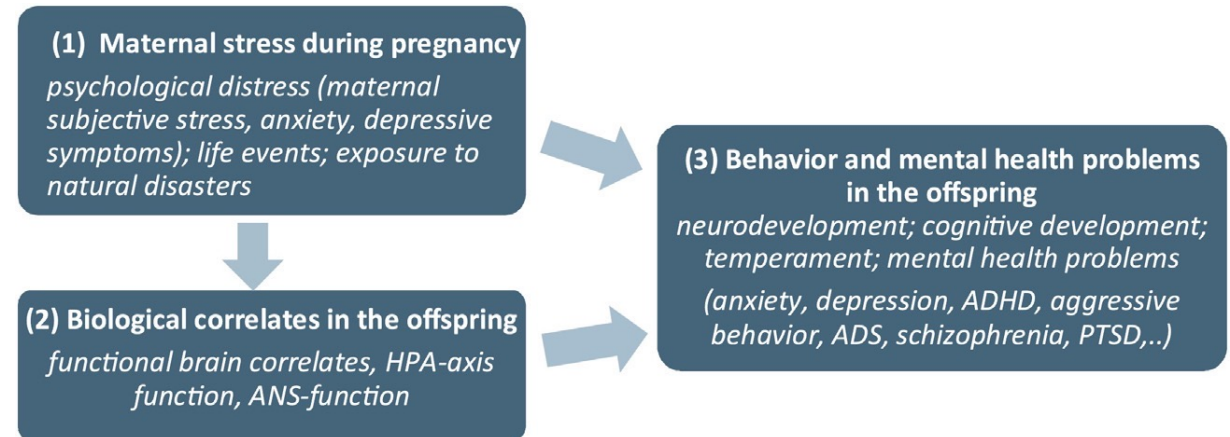
Alcohol

- Although there is no evidence of harm associated with low alcohol intake, there is also no evidence for a safe amount of alcohol during pregnancy
- Therefore most governments & the WHO take a precautionary approach and recommend not drinking at all

Sleep

- In addition to tiredness, pregnant women commonly report insomnia, strange dreams & disrupted sleep
- The safest position to go to sleep is on their side, either left or right. Research suggests that, after 28 weeks, falling asleep on your back can double the risk of stillbirth
- Waking up on their back should not be a cause for concern, simply turn over

Stress



- There is evidence of a link between maternal stress and negative pregnancy outcomes
- Mindfulness, breathing & relaxation techniques, and other stress management strategies can be beneficial

How to support lifestyle change in pregnancy?

Capability

- Tools to improve behavioural regulation, e.g. prompts, plans, reducing triggers
- Skill development e.g. breathing exercises, muscle relaxation

Motivation

- Small and/or gradual change is beneficial
- Clear, non-stigmatising messages about risks & benefits to baby
- Reminders of past success & seeing relatable others' make change
- Incentives

Opportunity

- Practical support, e.g. changing work & caring responsibilities
- Social support, e.g. partner or buddy making changes



Source: The behaviour change wheel: A new method for characterising and designing behaviour change interventions
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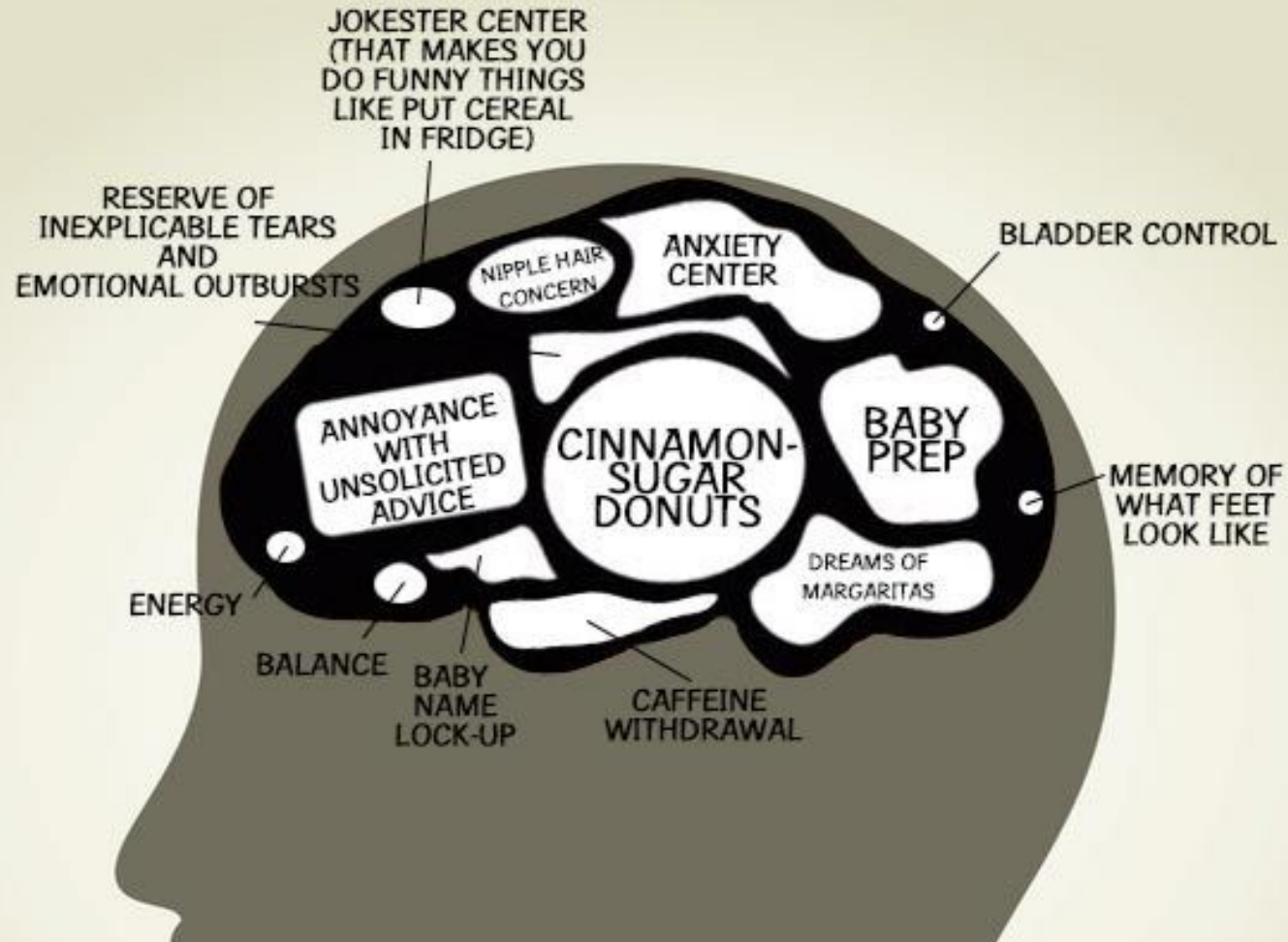
Energiser break



Mental health in pregnancy



ANATOMY OF A PREGNANT WOMAN'S BRAIN



Cognitive impairment

“Baby Brain”

- Systematic reviews (Henry & Rendell, 2007) and prospective studies (Christensen, et al., 2010) have concluded there is only **limited** evidence for impairment of memory or other cognitive functioning during pregnancy
- Suggested potential causes include; biochemical changes, lifestyle factors and cultural stereotypes.
- Regardless of whether reported effects can be measured objectively, the perceived changes in a woman’s mental capacity can be distressing.

Sleep

- Sleep disturbances are often experienced by women during pregnancy, potentially due to hormonal and physiological changes (e.g. discomfort, more frequent urination) (Lee, 1998) as well as pregnant women being predisposed to certain sleep disorders, e.g. insomnia, restless leg syndrome (Sahota, Jain & Dhand, 2003).

Maternal mental health

- It has been estimated that up to 18% of women experience depressed mood during pregnancy, with nearly 13% having an episode that would meet the Diagnostic and Statistical Manual Fourth Edition (DSMIV) diagnostic criteria for a major depressive disorder (Gavin, et al., 2005).
- It has also been estimated that up to a quarter of all maternal deaths are related to maternal mental health problems
<https://www.npeu.ox.ac.uk/mbrance-uk/reports>
- Pregnancy may be a risk factor for mental health problems due to:
 - Overlap of reproductive years and onset of mental health conditions
 - Stress of pregnancy as a trigger for an underlying biological vulnerability
 - Sleep disturbance

Maternal mental health

Many women's pregnancy mental health issues go undiagnosed.

Potential reasons include:

- Signs & symptoms similar to those of pregnancy, e.g. feeling 'out of sorts', excessive tiredness, low motivation for certain activities, difficulty concentrating, worry for others/the future, low self-esteem, etc.
- Reluctance to seek help
 - Feelings of guilt, perception of being a 'bad mother'
 - Stigma – pregnancy should be a happy time
 - Concerns of child being removed
- Lack of awareness of general public and some healthcare professionals

Physical activity & mental health

- There is growing evidence that being more active is associated with decreased risk of depression and anxiety during or after pregnancy (Davenport, et al., 2018)
- More research is needed to identify how physical activity protects against these mental health problems. It is likely to be a combination of physical and psychological effects, for example;
 - Mood-boosting hormones released during exercise
 - Improved sleep quality
 - Distraction from worries & negative thoughts
 - Staying connected to aspects of pre-pregnancy identity
 - Social support

Physical activity & mental health

- Symptoms such as tiredness, difficulty concentrating or remembering to do things, poor sleep and low self-esteem can make it more challenging for those experiencing mental health problems to be consistently active.
- It is really important these individuals do not feel added pressure to be active.
- The focus should be on activities that make them feel good, acknowledging that sometimes a bath, a nap, or meeting a friend will be the right thing for them.

Physical activity & mental health

If an individual wants to do something physical but is struggling to make it happen, try these options:

- Keep a mood diary - this helps identify when energy levels are highest, and also reinforce the benefits of being active
- Make a plan for when & what you will do and with whom, as this can help with decision making, and stop other things from taking over
- Work out how to make everyday tasks more active, so you don't have to make activity something extra to fit in
- Consider combining walking & talking, or other activities that support both physical and mental wellbeing

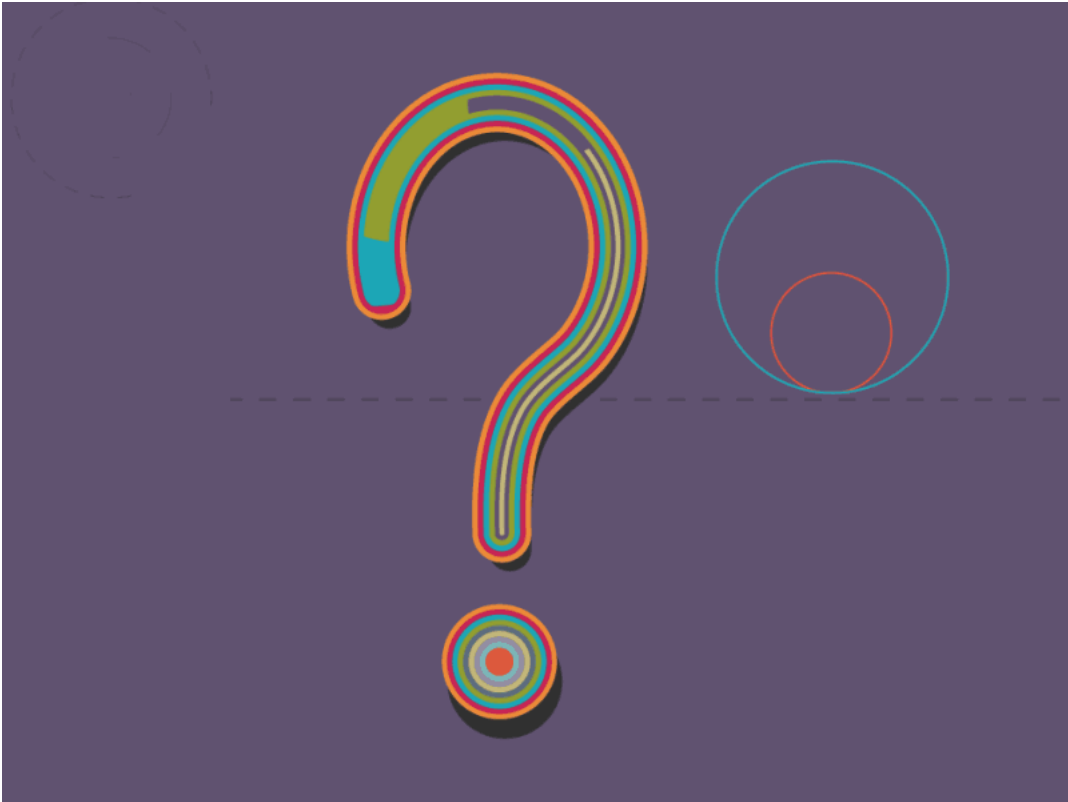
Physical activity & mental health

Most importantly:

- Emphasise that feeling low and experiencing depression or anxiety is ***not*** unusual
- Encourage them to disclose to their healthcare professional and/or seek mental health support

https://www.mind.org.uk/information-support/types-of-mental-health-problems/postnatal-depression-and-perinatal-mental-health/about-maternal-mental-health-problems/#.XFgvWM_7Q8a

Questions



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