# Lifestyle Approaches to Perinatal Mental Health



Dr Karen Joash

Dr Sonya Ghatahora

# Topics Covered Today

- What is Lifestyle Medicine?
- Socioeconomic determinants of health
- Approaches used in Lifestyle Medicine
- 6 pillars of Lifestyle Medicine
- How to integrate Lifestyle Medicine approaches with your patients
- Case Studies
- Barriers between Obstetric and Primary care

# Why this matters

- 1 in 5 women experience perinatal mental health issues (NHSE, RCOG 2021)
- Depression and anxiety during pregnancy increases the risks of pre-term birth, low birthweight and bonding difficulties.
- Lifestyle interventions can act as preventative and adjunctive treatments (NICE 2020; ACOG 2023)

# What is Lifestyle Medicine?

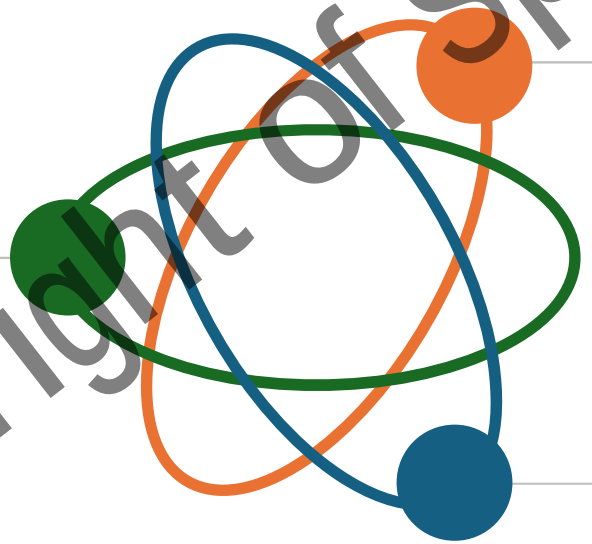
- Lifestyle medicine calls for a move away from traditional doctor-patient relationships where the clinician is the expert information provider. It fosters agency and empowers people to change their own lives and health.

- Evidence shows that giving simple lifestyle advice such as “eat less and move more” is often ineffective. Therefore, a more tailored approach is often necessary.

- Lifestyle Medicine uses knowledge of behavioural science to work with patients. To be effective, it should also consider the various social and economic determinants of health to tailor the support we give and make realistic, sustainable changes. Some of these techniques have been shown to be at least 80% more effective in supporting behaviour change than traditional advice-giving.

- BSLM accreditations; RCGP Prescribing LM course

# Biopsychosocial Model
# Body Mind Relationships



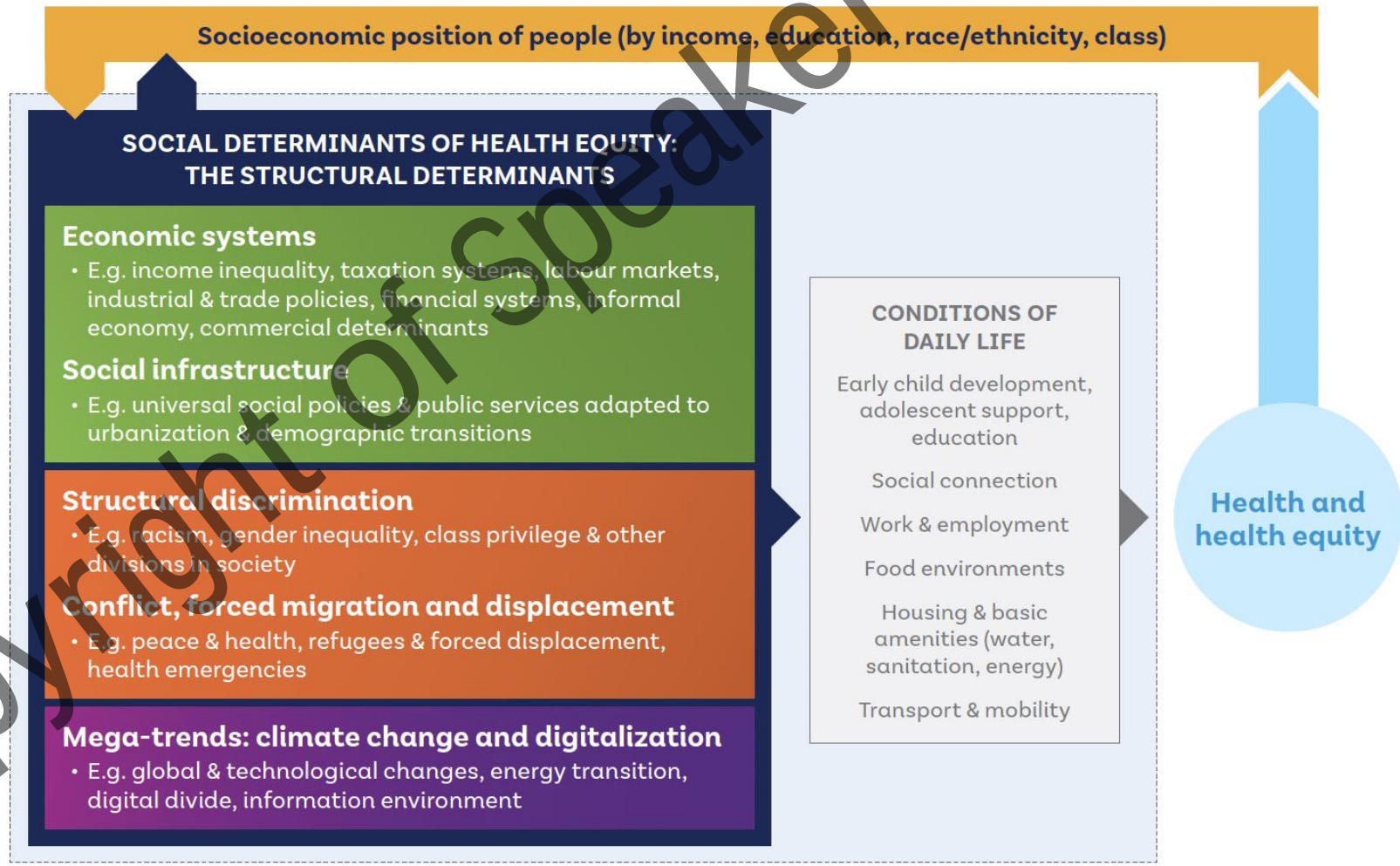
**Relationships**
Friends, family, partner, children, colleagues, work family

**Body**
Nutrition, exercise, sleep, pelvic floor, vitamins, birth preparation, immune strength

**Mind**
Relaxation, massage, music, mindfulness, art, visualisation
Thought control

# Socioeconomic Determinants of Health

WHO 2025: *'World report on social determinants of health equity'*

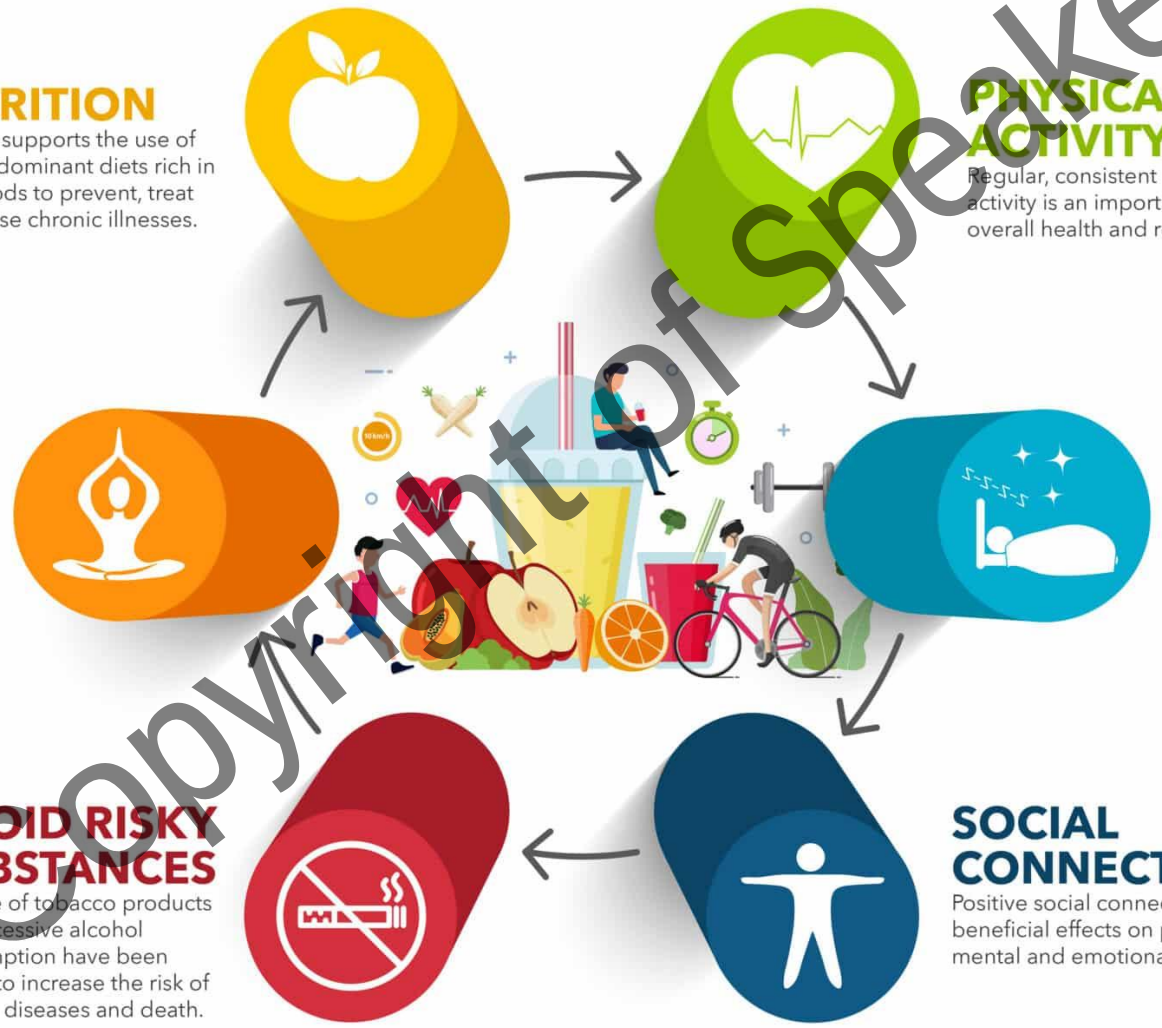


# Lifestyle Medicine approaches to patient care

| Principles of LM: | Techniques used | Delivery |
| --- | --- | --- |
| • Person-centred care<br>• Values-based care<br>• Supported self-care | • Motivational interviewing<br>• Cognitive Behavioural Therapy<br>• Health Coaching<br>• Brief Interventions<br>• Goal Setting<br>• LM prescriptions | • Social Prescribing<br>• Group consultations<br>• Use of patient activation measures<br>• Intensive LM interventions<br>• Lifestyle screening tool |

# THE SIX PILLARS OF LIFESTYLE MEDICINE

The aim of lifestyle medicine is to redesign health delivery to rely on therapeutic lifestyle interventions as a primary modality to treat, prevent, manage, and reverse chronic cardiometabolic conditions.



## NUTRITION

Evidence supports the use of plant-predominant diets rich in whole foods to prevent, treat and reverse chronic illnesses.

## PHYSICAL ACTIVITY

Regular, consistent physical activity is an important part of overall health and resiliency.

## STRESS MANAGEMENT

Managing negative stress can lessen anxiety, depression, and immune dysfunction and contribute to improved well-being.

## RESTORATIVE SLEEP

Improving sleep quality can improve attention span, mood, and insulin resistance, and can reduce hunger, sluggishness, and more.

## AVOID RISKY SUBSTANCES

The use of tobacco products and excessive alcohol consumption have been shown to increase the risk of chronic diseases and death.

## SOCIAL CONNECTION

Positive social connections have beneficial effects on physical, mental and emotional health.

# 1. Nutrition

**Assess**

Assess Nutrient Intake:

- Evaluate dietary habits to identify potential deficiencies in key nutrients such as folate, iron, calcium, vitamin D, omega-3 fatty acids, magnesium, and choline.

**Recommend**

Recommend Nutrient-Rich Foods:

- Encourage the consumption of nutrient-dense foods like leafy greens, lean proteins, whole grains, nuts, seeds, and fatty fish.

**Address**

Address Supplementation Needs:

- Advise on appropriate supplementation where dietary intake may be insufficient, particularly for nutrients like choline, which is often lacking in prenatal vitamins .

**Monitor**

Monitor Mental Health:

- Regularly screen for signs of anxiety and depression, and consider the role of nutrition in managing these conditions.

**Provide**

Provide Tailored Advice:

- Offer personalized dietary recommendations based on individual health status, cultural preferences, and lifestyle factors.

# 1. Nutrition & Hormones

**Key Neurotransmitters and Mood Hormones:**

**Serotonin:** Known as the "feel-good" neurotransmitter, serotonin plays a key role in regulating mood, sleep, and appetite. It's significantly affected by nutrient intake, particularly **B vitamins**, **magnesium**, **vitamin D**, and **probiotics**.

**Dopamine:** This neurotransmitter is linked to reward, motivation, and pleasure. It's influenced by **B vitamins** and **iron**, which are involved in its synthesis and regulation.

**GABA (Gamma-Aminobutyric Acid):** A calming neurotransmitter that promotes relaxation and reduces anxiety. **Magnesium** plays a significant role in enhancing GABA activity.

**Cortisol:** Known as the stress hormone, cortisol is regulated by several nutrients, including **magnesium**, **omega-3 fatty acids**, and **vitamin D**. Chronic high cortisol levels can contribute to anxiety and depression.

**Acetylcholine:** This neurotransmitter is involved in memory, mood, and cognitive function. **Choline** is critical for its production, and deficiencies can lead to cognitive decline and mood disturbances.

| Nutrient | Role in Maternal Health (Mental Health and Mood Regulation) | Neurotransmitters and Mood Hormones Implicated | Food Sources |
|---|---|---|---|
| **Probiotics** | Modulate the gut-brain axis, potentially reducing anxiety, depression, and stress. Probiotics support gut health, which is linked to mood regulation. | Serotonin (gut microbiome is a major site of serotonin production), GABA (inhibitory neurotransmitter that helps reduce anxiety) | Yogurt, kefir, sauerkraut |
| **Magnesium** | Regulates cortisol levels, alleviates stress, and supports relaxation. Magnesium deficiency is often linked to higher anxiety levels and mood disturbances. | Cortisol (stress hormone), GABA (promotes relaxation), Serotonin (regulates mood) | Leafy greens, nuts, seeds, legumes |
| **Choline** | Crucial for cognitive function and mood regulation. Involved in the synthesis of acetylcholine, which affects mood and mental clarity. Low choline is linked to depression and cognitive decline. | Acetylcholine (a neurotransmitter important for memory, mood, and cognitive function) | Eggs, meat, fish, cruciferous vegetables |
| **B Vitamins** | Support energy production and neurotransmitter synthesis. Deficiencies are associated with fatigue, mood swings, irritability, and increased risk of depression. B vitamins, particularly B6, B12, and folate, are vital for mood regulation. | Serotonin (B6 and B12 are involved in serotonin synthesis), Dopamine (B6 is involved in dopamine synthesis), GABA, Norepinephrine | Sunflower seeds, avocado, salmon, mushrooms, leafy greens, whole grains |
| **Vitamin D** | Supports serotonin production, which regulates mood. Low levels of vitamin D are strongly associated with depression and anxiety during pregnancy. | Serotonin (vitamin D is involved in serotonin synthesis), Dopamine (vitamin D modulates dopamine receptors) | Fatty fish, fortified dairy, egg yolks, sunlight |
| **Iron** | Essential for hemoglobin production. Iron deficiency often leads to fatigue, irritability, and low mood, as it impacts oxygen delivery to the brain, which can affect neurotransmitter function. | Dopamine (iron is required for dopamine production), Serotonin, Norepinephrine | Red meat, spinach, legumes, fortified cereals |
| **Omega-3 Fatty Acids** | Support mood stabilization and reduce anxiety and depressive symptoms. Omega-3s, especially DHA, influence brain function and are linked to lower levels of anxiety and depression. | Serotonin (omega-3s influence serotonin receptor function), Dopamine (omega-3s support dopamine transmission), Cortisol (omega-3s reduce cortisol production) | Fatty fish (salmon, sardines), flaxseeds, walnuts, chia seeds |

# 2. Physical activity

- During pregnancy, many women feel they should slow down, often fearful of impacting the growing foetus.
- Moderate exercise reduces perinatal depression by up to **40%** (Daley et al. 2015; ACOG 2020).
- Improves sleep, self-esteem, and physical recovery postpartum.
- No increased risk of miscarriage in healthy pregnancies.

# 2. Physical activity

**During pregnancy:**

- Aim for 150 mins/week of moderate activity (walking, swimming, antenatal yoga).
- Avoid contact sports, overheating, or supine exercise in late pregnancy.

**Postpartum:**

- Start with gentle walks, pelvic floor exercises and deep 360 degree breathing techniques from Day 1 (if uncomplicated).
- Increase intensity gradually – dependent on pre-pregnancy activity levels
- Importance of postnatal physiotherapy – pelvic floor/diastasis and other core issues.
- Most postnatal yoga/Pilates would like someone to be reviewed at their 8-week check before commencing.

# Physical activity for pregnant women


UK Chief Medical Officers' Physical Activity Guidelines, 2019

# Physical activity for women after childbirth (birth to 12 months)


UK Chief Medical Officers' Physical Activity Guidelines, 2019



Dept of Health & Social Care infograms

# 3. Restorative Sleep

- Restorative sleep is not just about rest—it's a vital process that supports the intricate functions of the mind and body, particularly during pregnancy.
- Adequate, high-quality sleep is essential for maintaining emotional stability, enhancing cognitive performance, and ensuring the optimal functioning of neural networks.
- The sleep-wake cycle plays a critical role in regulating mood, supporting memory consolidation, and repairing neural connections that are continuously reshaped throughout the day.

# Scale of Sleep Disturbance

- Salari et al BMC pregnancy and childbirth 2021 systematic review found that 42% of women reported insomnia in the third trimester
- **Restless Legs Syndrome (RLS):** The National Sleep Foundation reported that up to 25% of pregnant women develop RLS during the third trimester
- **Obstructive Sleep Apnea (OSA):** Research indicates that OSA affects between 8% and 32% of pregnant individuals, with obesity and age being significant risk factors (verywell health)

# Types of Sleep Disturbance

| Type of Disturbance | Description | Strategies to Address | Evidence-Based Signposting for Maternal Mental Health |
|---|---|---|---|
| **Sleep Latency (Difficulty Falling Asleep)** | Time taken to fall asleep, often due to racing thoughts, anxiety, or physical discomfort. | Encourage relaxation techniques like progressive muscle relaxation, guided imagery, or music scripts. | Cognitive Behavioral Therapy for Insomnia (CBT-I) has been found effective for reducing sleep latency in pregnant women. |
| **Sleep Disruption (Frequent Waking During the Night)** | Waking up multiple times during the night, often caused by pregnancy-related discomfort or hormonal changes. | Positioning strategies, such as using a pillow to support the belly or between knees, can alleviate discomfort. | The use of maternity pillows and proper sleep positioning has been shown to improve sleep quality during pregnancy. |
| **Early Morning Waking** | Waking up too early, often associated with hormonal changes, anxiety, or stress. | Practice relaxation techniques before bed, limit caffeine, and ensure a calming pre-sleep routine. | Maternal anxiety and hormonal fluctuations are linked to early morning waking. Mindfulness and relaxation exercises have been shown to alleviate these symptoms. |
| **Difficulty Staying Asleep (Sleep Fragmentation)** | Waking up intermittently and struggling to return to sleep. Often linked to physical discomfort or | Encourage deep breathing exercises, use of comfortable sleep aids, and relaxation techniques | Sleep hygiene practices and relaxation techniques improve sleep consolidation during |

**Initial Assessment:**

- **Identify Sleep Patterns:** Assess sleep duration, latency, fragmentation, and disruptions through a detailed questionnaire or sleep diary.
- **Assess for physical Issues** eg. OSA, Restless Legs
- **Understand Maternal Mental Health:** Screen for anxiety, depression, and stress using validated scales like the **EPDS (Edinburgh Postnatal Depression Scale)** or **STAI (State-Trait Anxiety Inventory)**.

**Sleep Environment Evaluation:**

- Ensure that the sleep environment is conducive to rest (e.g., a dark, quiet, and comfortable room with appropriate temperature).

**Sleep Hygiene Education:**

- Educate on the importance of regular sleep patterns, avoiding caffeine late in the day, and engaging in a calming pre-sleep routine.

**Interventions:**

- **Cognitive Behavioral Therapy for Insomnia (CBT-I):** Evidence suggests CBT-I can help pregnant individuals struggling with sleep issues related to anxiety or stress (PMC).
- **Relaxation Training:** Use techniques such as progressive muscle relaxation, guided imagery, or mindfulness.

**Signposting to Support Services:**

- **Mental Health Support:** If mental health concerns are identified, signpost to counselors or perinatal mental health teams.
- **Physical Therapy:** If positioning discomfort or physical pain is an issue, refer for physiotherapy or massage therapy.
- **Nutrition support** : Iron RLS, Magnesium, Vitamin D

**Follow-Up:** Reassess after 2-4 weeks to evaluate the effectiveness of the interventions and modify the plan as needed.

# 4. Social Connection

- Social connection is important during pregnancy and postnatally. Each phase of this journey can potentially be an isolating experience.
- Low social support is a **major predictor** of perinatal mental illness (Biaggi et al. 2016).
- Postnatally, factors such as pain, poor sleep, feeding problems, fatigue, relationship strains, lack of family connections, can all contribute to feeling more isolated and potentially impact on mental health.
- Peer support improves confidence, reduces anxiety, improves bonding.

# 4. Social Connection

**Antenatally:**

- Antenatal groups, meet-up apps e.g. Peanut.
- Make use of Social Prescribers – link into local community groups and mental health support.

**Postpartum:**

- Meeting up with antenatal groups etc.
- Attend local baby classes – e.g. Happity (can be expensive)
- Attend postnatal yoga/Pilates classes
- Social Prescribers support
- Use online communities if in-person options are hard.
- Mental health support groups, e.g. Mindful Mums, women's circles

# 5. Avoid Risky Substances

**Antenatally:**

- Alcohol, tobacco, and recreational drugs all harm foetal development and increase maternal mental health risks.
- However, judging or demonising women who do take substances will only alienate them more. Be curious about why they use them and offer support without judgement.
  - e.g. NHS Smokefree, local Drug & Alcohol support.
  - Address any underlying mental health/social issues – therapy, social prescribing, etc.
- Caffeine over 200mg/day is associated with increased anxiety and miscarriage risk (NHS).

**Postpartum:**

- Alcohol and recreational drugs can worsen sleep and mood.
- Pre-pregnancy smokers – high risk of relapse in this period due to stress/MH issues.

# 6. Stress Management

- Multiple potential causes of stress perinatally – our role is to support people to work out what these factors are, eliminate triggers where possible and improve self-management of their stress.
- Chronic stress during pregnancy affects **placental function, foetal brain development,** and **maternal immune responses** and can lead to anxiety/depression.
- Mindfulness-Based Cognitive Therapy (MBCT), mindfulness, and CBT shown to reduce perinatal anxiety/depression (van Ravesteyn et al. 2017).

➢Most areas: patients can self-refer to NHS talking therapies – fast-tracked if pregnant or within 1 year of giving birth.

# 6. Stress: Low-level Management

**Antenatally:**

- Guided visualisations, prenatal meditation/yoga nidra apps
- Antenatal yoga/Pilates or other exercise classes.
- Journaling and gratitude practices can be helpful for some people.

**Postpartum:**

- "Micro-moments" of calm: 5-min breathwork, stretching, tea without multitasking.
- Avoid perfectionism – prioritise connection and rest over "doing everything" e.g. housework, etc.
- Ask for and accept support offered.
- Identify emotional early warning signs and talk early.

# Case Study 1

- 32 yo F
- G2P1 – 18/40
- Living in temporary accommodation, having fled a DV relationship.
- Speaks little English
- No family nearby
- Presents to antenatal appointment - appears down, not talking much.

# Case Study 2

- 40 yo F
- G1P0 – 25/40
- IVF pregnancy – twins
- High-powered lawyer in an investment bank.
- Presents to antenatal appointment – late for her appointment, stressed, angry at staff, says she couldn’t find parking.

# Case Studies

- How would you approach each patient?
- What would be the main priorities in each scenario? How do these differ, based on their individual circumstances?
- What techniques could you employ during your consultation to support them in making positive lifestyle changes?
- Which referrals would be helpful in each scenario?

# Barriers between Obstetric and Primary care

- Limited Cross-Specialty Communication
  - Maternity notes not routinely accessible to GPs.
  - Difficult for GPs to access Obstetric teams involved in a patient's care – unclear who is responsible, most women not directly under an Obstetrician.
  - Discharge summaries often focus on physical, not mental, health – often very little information included.
- Women can fall through the gaps after hospital discharge
  - This is often the high-risk time for severe mental illness
  - GPs don't see women until the 8-week check – importance of midwife/HV input during this period.
- Stigma & Fear of Disclosure
  - Fear of SS involvement can stop women from seeking help.

➢ How can we create a more open environment for disclosure?

➢ How can we improve shared care?

Thank you

Questions?