Depression, obesity, and their comorbidity during pregnancy: effects on the offspring’s mental and physical health

Evidence confirms that depression and obesity are among prevalent complications during pregnancy, putting both the health of the mother and child at risk. To date, few studies have analysed the impact of living with depression and obesity concurrently on health outcomes. Further investigation is needed to understand the extent to which living with either condition impacts birth weight, physical, cognitive, socio-emotional development, and academic performance.

The study confirmed the complexity of the relationship between depression and obesity suggesting that the offspring of mothers living with obesity are at increased risk of developing mental illnesses, metabolic dysfunction, and cardiovascular diseases.

Factors that mediate the effects of depression and obesity in the mother include stress, nutrition, and the intrauterine environment. These shape foetal programming and the offspring’s availability; thus, caution must be excised to avoid stress and to engage in healthy nutrition practices (adequate, energy, protein intake, essential fatty acids, and micronutrients). It is well documented that stress can also drive unhealthy eating behaviours through hormonal responses.

In summary, the relationship between depression and obesity is complex and it is still unclear whether maternal depression leads to obesity or vice versa. Further studies should investigate where combined exposure to these disorders is associated with a higher risk of negative health outcomes, taking into consideration gender differences, time of onset, the role of nutrition (including omega-3 intake), and mindfulness techniques.