People say that "a happy mother means a happy child." This is confirmed by research results. A young child reacts with joy to the sight of the smiling mother and with crying and fear to the sight of sadness on her face. A woman who is satisfied with her life and experiences positive emotions shows them also in the child's presence, thanks to which the child feels accepted and has a sense of giving joy to the mother with his or her very presence. Moreover, a happy mother provides a model of a way of living that the child can imitate.

The period particularly important for the child's mental development is the first months of his or her life, when the basic ways of perceiving and reacting to the surroundings are formed. This is what makes the mother's emotional state so important in this period. But the postpartum period is one of the most difficult challenges parents face. As research results show, the birth of a baby is associated with the experience of strong emotions, not only positive but also negative ones. It is estimated that approximately 10–15% of women in Poland show symptoms of depression in the postpartum period. As far as European countries are concerned, the levels of postpartum depression symptoms are the lowest in Austria (approx. 5%) and the highest in Italy (approx. 40%).

Postpartum depression symptoms—namely, lasting low mood, blaming oneself, a feeling of emptiness, helplessness, and anxiety, as well as thoughts of harming oneself and the child—constitute discomfort for the mother. Beck (2003) calls them a thief that steals motherhood. It has been found that the children of mothers with postpartum depression symptoms are more poorly developed cognitively and emotionally as well as have more health problems and a weaker relationship with the mother compared to children of mothers without such symptoms. In extreme cases, the mother takes her own and the baby's life. It is therefore important to examine pregnant women for the risk of postpartum depression symptoms. This kind of assessment requires knowledge about the factors influencing women during pregnancy that affect their emotional state after childbirth. Studies show that the psychological factors influencing a woman before childbirth significantly impact her mental state in the postpartum period. Some believe that these factors are more important than those which occur after the birth of a baby.

The aim of the project is to investigate how time perspective and circadian rhythm disruptions are related to stress and depression symptoms after childbirth. We predict that the pregnant woman's and her partner's time perspective will influence the woman's emotional state after childbirth by modifying the relationship between circadian rhythm disruptions and stress as well as postpartum depression symptoms. Why do we believe that time perspective during pregnancy is so significant for the woman's emotional state in the postpartum period? Time perspective is a tendency to focus on the past, present, and future combined with a positive or negative evaluation of a particular area of time. The birth of a baby, particularly of the first baby, is one of the major changes in life. What becomes particularly significant when one is faced with a serious change is attitude towards what has gone by and towards the new reality that sets in. We therefore predict that especially attitude towards the past and the future will influence the woman's coping with her rhythms of day and night disrupted by the newborn baby. This will be reflected in her level of stress and in her emotional state. Moreover, our previous studies on patients undergoing surgeries showed that focus on the negative past was a predictor of the level of pain and stress experienced after surgery; the results of our meta-analysis of studies addressing the determinants of postsurgical pain revealed that, among the psychological factors investigated, the strongest predictor of postsurgical pain was the exaggeration of future dangers.

The research planned in the project will be conducted in Austria, Poland, and Italy—countries with a low, medium, and high frequency of postpartum depression symptoms, respectively. In each of these countries, a sample of 100 women and 100 partners of these women will be examined. The first study will be conducted during the first gynecological visit in the first trimester of pregnancy; the second one will be held in the third trimester of pregnancy, the third one will be carried out in the fifth week after childbirth. In each stage we will measure objective disruptions to circadian rhythms using actigraphs as well as subjectively perceived disruptions to circadian rhythms using actigraphs as well perform physiological measurements of stress—including hair cortisol level measurement—and subjectively perceived stress measurements. Depression symptoms will be measured with the Edinburgh Postnatal Depression Scale.

The results obtained in the planned research will enrich the knowledge about psychological predictors of stress and postpartum depression symptoms. This knowledge is all the more important because the period of pregnancy and the first months after childbirth is a time when most women regularly see a doctor. Therefore, in this period it is possible to carry out assessment as well as preventive and therapeutic interventions in the case of women from risk groups for postpartum depression symptoms. The obtained results will be useful in the preparation of training programs for gynecologists and midwives, sensitizing them to the significance of attitude towards time in women during peripartum, and in the preparation of a set of tools for assessing the risk of postpartum depression symptoms.