Analysis of the psychological health implications of women's maternity process based on the PPCT model

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Abstract: Childbearing and raising the next generation is common concern in society, especially when the fertility rate is low. Most women become mothers through childbirth and take on the heavy burden of child rearing, therefore suffer from both physical and psychological changes. Among the progress, the mental health of new mothers deserves attention. Bronfe nbrenner's PPCT model is a new development of ecosystem theory, which not only puts the individual in a variety of distal systems, but also brings a more subtle perspective on the individual's proximal factors. Therefore, this paper adopts the PPCT model to systematically review the existing literature on women's mental health in the process of motherhood. Firstly, this paper analyse the role changes faced by women in the process of motherhood, and then it summarise the specific factors affecting the mental health of new mothers in the context of distal and proximal factors. Distal factors include social systems, family systems, and proximal factors include trauma and resilience, and individualised personality experiences

1. Introduction

Becoming a mother is a far-reaching event in a woman's life, affecting almost all aspects of her life, including physical aspects, social relationships, personal identity, even potentially postpartum depression as well as exposure to the risk of death. By analysing a continuum of data collected over a long period of time from a Dutch kinship group study, Kuipers et al. found that mothers who have given birth to a child can be more mentally unstable than women who have not given birth to a child, due to a number of factors[1]. The mental health problems of married and pregnant women are likely to affect the mental health of their children or even lead to a crisis in the whole family system. Juan studied the online speeches of contemporary young women about childbearing from the perspective of identity concealment, in which the concern about physical and mental health problems is one of the factors affecting fertility intentions [2]. Therefore, it is necessary to clarify the study of the factors related to the mental health problems caused by women who becoming mothers. While women become mothers not only by giving birth to their own children, but also by adopting and becoming stepmothers, the focus of this paper is on the majority of mothers who go through the process of pregnancy to give birth to and raise their biological children.

The Process-Person-Context-Time (PPCT) model was proposed by Bronfenbrenner & Evans,

which contains Process, the process by which an event occurs; Person: an individual's characteristics,attitudes and experiences; Context: the multilayered environment in which an individual is located, etc; Time: the individual's environment exposure time history, etc. [3].Compared to the previous macro ecosystem theory, the PPCT model has a dual focus on the environment and individual attributes, especially on the individual. While ecosystem theory has been recognised and used for public mental health construction and social intervention decision-making, the PPCT model has a deeper understanding of the development of the individual's psychological personality and deserves to be used more widely. By utilising the PPCT model, this paper aims to explore the pressures of motherhood and the new changes in life from a more nuanced and microcosmic perspective, yet more in-depth research is needed on how girls adjust their mental health in the context of accepting the identity of motherhood. However, as the Time factor has rarely been quantified in previous empirical studies, this paper does not summarise this factor sufficiently, but this is a direction for subsequent research.

2. A new phase of life: translation to motherhood

There are multiple dimensions to the process of motherhood, including physical changes from pregnancy to childbirth, positive and negative effects at the psychological level, adaptation to motherhood at the social role level, and reconstruction of parent-child and multiple interpersonal interactions at the interpersonal level. Part of the psychological reason why the transition to motherhood is a challenge is the change in the mother's self-identity (Women's Identity Development), a process that Uriko analyses in depth using the construct theory of self-dialogue, which suggests that mothers complete the transition from "I as pregnant" to "I as mother" through a constant self-talk with their bodies as well as with their emotional experiences from the time of pregnancy onwards. "I as pregnant" to "I as mother" through continuous self-dialogue with bodily and emotional experiences, which also involves socio-cultural external influences (Figure 1) [4].
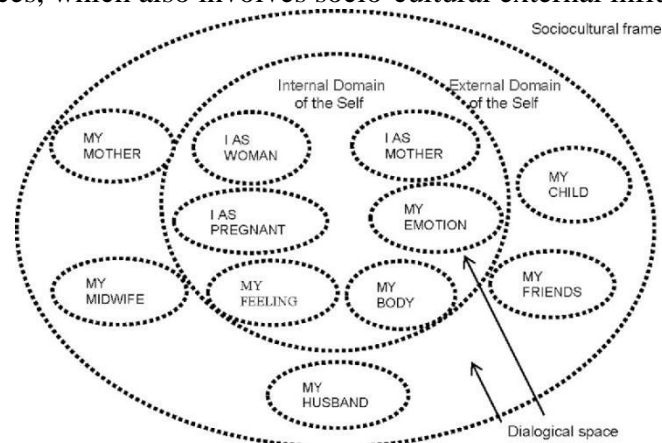

Figure 1: The self-dialogue forming of mothers 'self- identity(4).

Heisler & Ellis place more emphasis on the role of socio-cultural factors, defining this process as the input and output of motherhood. In other words, through messages from others and cultural expectations of being a "good mother",then a woman's sense of motherhood is gradually shaped and she will adopts a series of attentiveness and educational behaviours towards her children as expected, ultimately displaying her motherhood in social contexts such as children's achievements, parent-child interactions, and self-sacrifice [5]. Donath's in-depth interviews with Israeli women revealed the contradiction between societal expectations and the self-experience of motherhood. The traditional society often views "motherhood" as a vocation of women. And the conventional cultural conceptualisation remains that only a woman who has given birth is complete. But actually

there are the traumas of motherhood in some mothers' personal experience [6]. This exists an indifference to the internal situation of women.

3. Distal psychological factors affecting mothers' mental health

3.1. Social system

The hegemonic ideology of motherhood assumes that parenting is mainly a mothers' duty. Under this social norm, motherhood expectations are socio-culturally channelled. In China, Mengzhu used a fieldwork research to observe and record a WeChat parenting group in a hospital for twelve months, and found that under media infiltration, motherhood is no longer a privatised field of individual practice, but rather is driven by a combination of state discourses, market guidance and traditional cultural discourse systems[7]. However, although the dissemination of these messages and discourses facilitates mothers' learning about and practice of motherhood, mothers often succumb to the irresistible hegemony and lose their initiative, trying to be the good mothers portrayed by the media and bearing the pressure behind them in silence. Nonetheless, this pluralistic and interactive perspective not only inherits the socio-cultural shaping of motherhood, but also introduces the notion of the positive significance of new media in empowering mothers. On the other hand, social media is interactive, and in addition to shaping the image of motherhood, many mothers also take ownership of their role construction and specialised self-presentation on social media and derive psychological satisfaction in the process. The Internet provides a space for young mothers to share their feelings about their role as mothers, to express their personalities and to maintain their social relationships. Considering the audience of social media, mothers use this arena to continually present themselves through the creation of satisfactory maternal roles.

A large number of studies have shown that social support during pregnancy is more closely linked to the mental health of the mother-to-be during the gestation [8].The social support satisfaction table reveals five sources of support (from spouses, young women's mothers, families, friends, and professionals), each of which relates to different types of support, i.e. emotional, respectful, material and informational. These differences, in addition to national and socio-cultural factors, may be explained by the time intervals of environmental factors in which new mothers are present. For example, working mothers are more likely to be influenced by social factors; whereas full-time mothers spend most of their time in the family system, and the interactions they encounter are mostly surrounded by intergenerational relationships, partnerships, and parent relationships.

3.2. Household system

The family system theory suggests that individual relationships in the family are viewed as interactive and reflective subsystems. However, mothers are generally influenced by elders, husbands and children in the household system. Through a metaphorical analysis of the study, Riem and others selected 11 participants from the database of papers such as PubMed, EMBASE, MEDLINE, Scopus and PsychicINFO, using keywords, as well as unmarried children, grandchildren, and other unified families that live together. The conclusions support the grandmother hypothesis, which means that high-quality support from grandparents, especially grandmothers, is beneficial for the mental health of new mothers [9].Yet these studies mainly from USA.On the contrary, studies in China have shown that mothers living with grandparents are more likely to have psychological problems than new mothers who live with their husbands alone. The study used the Edinburgh Postnatal Depression Scale to evaluate depression measurements of 1126 participants, and used the logical regression model to estimate the relevance[10]. The difference in results may be based on different national circumstances, and although the help of the elderly can

relieve the childbearing stress of the new mother, the contradiction of the mother-in-law relationship is more common in Chinese culture, and if the grandmother comes to childbear, the Chinese new mother may feel a heavier pressure.

In addition, with the arrival of the baby, the previous family routine and patterns of coexistence will be broken, bringing many new tasks. These will in the first place cause some damage to the life of the couple. Secondly, although the role of the father in the family system cannot be overlooked, in most cultures and countries the mother is always the primary responsible for raising the child. Since the role of the father in childcare culture is underestimated, the father's absence and disappearance can lead to problems in the family system, which not only adversely affect the new mother's mental health, but even affect the normal development of the child. Zhang & Razza conducted an empirical study of the involvement of fathers of different races, and the data showed that the participation of the father in the family dynamics not only improved the relationship between the couple, but also served as a buffer for the negative emotions of the mother[11].However, the influence in relationships is not a linear cause-and-effect pattern, but a cyclic causal pattern. Not only do others have an influence on the newcomer mother, but the attitude of newcomers to others also influences others and themselves. So the influential child is worth paying attention to.The reciprocity of parent-child relationships is widely accepted, but most studies focused more on the impact of parent and child relationships on children, such as the formation of early attachments in children. But the impact of children on parents cannot be overlooked.

The social challenges encountered in the process of becoming a mother are outlined above. First, there is the irrationality that social norms demand for mothers to be able to adapt quickly to new roles and devotion, and to keep balance between work and family relationships. Second, in the context of the PPCT model, mothers are passive bearers, including accepting social standards, receiving the assistance of grandparents or fathers, and the impact of mother-child relations.

4. Mother's personal close-in influences

Moreover, some researchers have criticized the traditional maternal-centred responsibility and social norms for the child, emphasizing the need for social families to share their children, rather than support and help. Therefore, the near-end factor of the person in the PPCT is worth exploring further from a feminist perspective. For example, the period of maternal pregnancy, the peripheral period and post-partum mental health issues are often regarded as postpartum depression, however, the research perspective of this pathology remains controversial. But the adverse effects of fertility and being a mother on women are objectively present.

4.1. Trauma and resilience

Not all mothers are able to naturally develop maternal affection and enter the maternal profession in their childhood, and some new mothers experience feelings of guilt, pain, sadness and struggle to love their own children due to trauma in the production, expectation of collision with reality, etc. According to a study carried out in Israel, even though they have raised many children and even become grandmothers, there is regret when they look back on their maternal career and view it as a trauma [6].Even in Sweden, a family-friendly society with more gender equality and strong social benefits, there is still a large number of parents who regret being parents in their personal experiences. Reasons for regret include premature childbearing, excessive pressure on mothers under social norms, underestimating maternal difficulties prior to childbirth, and considering that they find it difficult to fulfil their maternal duties. While most women still endure post-partum vulnerabilities and child-care challenges, with the common saying that they are "motherly", and research has shown that this is related to resilience.

The concept of resilience remains a broad view of health and well-being, as a positive psychological state, which, in contrast to traditional in-depth studies of negative emotions such as "depression" and "anxiety". It helps to understand the processes, assets or protective factors that restore or maintain mental health in times of adversity. Studies have shown that resiliency resources, especially the ability to control life, are critical to new mothers during childbirth and can act as mediators to effectively regulate stressful life events and negative feelings such as depression [12].The study picked out 233 pregnant women with an average age of 30 or so, who were pregnant with multi-ethnic, multi-classific, and conducted six vertical psychological interviews from pregnancy to childbirth, confirming previous research findings that resilence can be associated with great symptoms of mental health and wellbeing.

4.2. Personalized individual experience

In addition to the common factors, different mothers have different psychological capabilities and situations because of their character, experiences and family backgrounds. Therefore, different mothers are also subjected to different mental stresses when dealing with childbirth and raising children. Bad childhood experiences are thought to lead to future mental health problems, but studies have shown that young mothers who have experienced childhood difficulties view child-rearing as a turning point in life and make up for their own childhood shadows, whereas they value and cherish their own children more. However, the study focused on only 15 young mothers living in Babayhome[13]. Firstly, there were fewer samples, and secondly, those mothers who had received professional social support may have experienced psycho-negative emotions, while most teenage mothers may not have received adequate support. In addition, the age of newcomers is also an important influence factor. Studies have shown that adolescent mothers face both adolescent mental health difficulties and maternal shifts[14]. Such cognitive and responsive policies seem to be divergent from the experiences of some teenage mothers. And through review and critical analysis of previous studies, age of pregnancy has been found to be less correlated with social outcomes. Some adolescent mothers describe that maternity gives them motivation and opportunities to receive education, training and employment, and that adolescent parenting represents a new opportunity for them. So the irresponsible prejudice of the traditional perception of teen mothers is being broken. Studies of adolescent motherhood practices and concepts have shown that many adolescent mothers place motherhood first, take responsibility for their children and turn the advantage of youth into the practice of motherhood.

5. Conclusion

This paper systematically summarizes the impact factors of existing empirical studies based on the PPCT model. Although there has been considerable research on the mental health of mothers, more recommendations lie in improving the objective environment to promote mental health, including the role of others and cultures in society and the family. In the future, more female researchers are expected to focus more attention on female mental health and mental struggle, thereby promoting female fertility and positive and healthy development as mothers.

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