

Comfort Space for Depressed Woman after Giving Birth: The Enticing Factors

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ABSTRACT

Architecture is closely related to human and also related to their ways of life. Different ways of human life can create different architectures. But it is not impossible that architecture itself can change human's way of life. Postpartum women have a lot of problems, especially mental and psychological problems. There are a lot of concepts of architecture that can help woman to solve their problem after giving birth, make them find their comfort space so that their depressive symptoms slowly diminish. This research was trying to find the enticing factors that make woman enjoy their space and help them reduce their postpartum depression symptoms. The analysis used in this study was inferential analysis, namely factor analysis to find the enticing factors. This research found that comfort space for depressed woman after giving birth could be affected by three factors, namely feminine concept, privacy concept and self-care concept.

Keywords: comfort space, factors, postpartum depression

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1. Introduction

Women have a nature to give birth to babies, and not all of people know that giving birth is not just about bring the baby out from the womb, but there are unusual symptoms caused by changes in the hormones estrogen and progesterone which decrease drastically, and it is not uncommon for this to happen, and these are rarely diagnosed, so the condition will progressed badly and there was a feeling of hurting herself and the baby, this kind of condition called postpartum depression [1].

This kind of condition should be treated, or this condition will get worse and become more serious that is called puerperal psychosis. There are some differentiation between baby blues, postpartum depression and puerperal psychosis, but those things have several similarity namely all of them are the mental problem of woman after giving birth [2]. In

fact, the environment around the woman who has just given birth can greatly help to cure their depression. The environment means everything around them and one of them is the space that is lived by the woman, or it can be called, the architecture.

There are many ways to find a comfortable space for women who have just given birth, from improving their environment or finding a suitable application of architectural concepts. Architectural elements can also help to change the mood of the occupants. In this case psychologically architecture can be one of the factors that help cure mental problems [3].

Environmental factors are the holder of the largest role in the human healing process, with a percentage of 40%, while genetic factors are only 20%, medical factors are only 10%, and the remaining 30% is from other factors [4]. The environmental factors are the natural

environment and the artificial environment. Related to the large role of the environment in health and the healing process, environmental factors are important points that must be considered in designing a building.

2. Material and Method

An architectural concept is needed that can change the way of life of the women who experience symptoms of postpartum depression. Residential buildings are used as a place to live by most women after childbirth.

The method that was used in this study was a quantitative method, using inferential factor analysis, which was obtained through a questionnaire and submitted to the respondents totaling 54 people with the sample selection method, namely purposive sampling and followed by snowball sampling. The questions on the questionnaire were closed questions, namely questions with answers in the form of a Likert scale. These answers have been processed and analyzed using statistical tools to find the trend of the distribution of the factors.

2.1. Depressed Woman after Giving Birth

The postpartum period is defined as a time of increased risk of serious mood disorders. There are three common forms of postpartum affective disease, namely the blues (baby blues, maternity blues), postpartum depression and postpartum psychosis (puerperal psychosis), each of them differs in prevalence, clinical presentation, and management [2].

Untreated postpartum depression can have long-term adverse effects. For mothers, these times can be the beginning of chronic depression that recurs. According to [5], for children of depressed mothers, a mother's continued depression can contribute to the child's emotional, behavioral, cognitive and interpersonal problems later in life [6].

Baby blues is the most commonly observed

postpartum mood disorder, with an estimated prevalence ranging from 30-75%, symptoms begin within a few days after delivery, usually on the 3rd or 4th day, and persist for hours to several days. Symptoms include unstable mood, sensitive feelings, sadness, anxiety, sleep disturbances and decreased appetite. Baby blues has time-limited, tend to be mild and do not require special treatment, the symptoms will disappear within a few days [7]

A well-maintained home will help mothers reduce the symptoms of postpartum depression. Architecture is the most related thing at home to improve to cure their postpartum depression symptoms [4].

The tendency to develop the baby blues is not related to psychiatric history, environmental stress, cultural context, breastfeeding, or parity, but these factors can lead to major depression. It is known that up to 20% of women who experience the baby blues will continue to experience major depression in the first year postpartum [8].

Data from large population-based studies show that postpartum depression is the most common complication, occurring in 10-15% of women after childbirth [7] and the number has increased to 10-25% in studies in recent years [2]. It usually begins within the first six weeks postpartum and most cases require treatment by a healthcare professional. The signs and symptoms of postpartum depression are generally the same as those of major depression, including a depressed mood and low energy. Even reports of incidents of attempted suicide rates are common.

[7] also stated that a very severe depressive state characterized by the presence of a psychological state is classified as a postpartum psychotic affective disease. It differs from postpartum depression in its severity, symptoms, treatment and outcomes.

Postpartum psychosis is the most severe and rare form of postpartum affective disease, with a rate of about 1–2 events per 1000 deliveries. Its onset is rapid, with symptoms appearing in the first 48 to 72 hours postpartum, and most events developing within the first 2 weeks after delivery. Symptoms are usually depressed mood or can be suddenly happy (which can fluctuate quickly), disorganized behavior, mood liability, and worst of all, delusions and hallucinations.

Mothers who experience postpartum psychosis will hurt themselves and their babies by neglecting and inability to fight the situation, caused by hallucinations or delusions experienced by the mother, so in this situation, intentional infanticide is rare, but infant deaths occur more because of the neglect of the baby. However, mothers with postpartum psychotic disorders showed a significant percentage and showed that 62% of mothers who committed infanticide also committed suicide [8].

Postpartum depression is the most common complication. The effects of postpartum depression are enormous, the negative effects are enormous [9]. Depression after giving birth can change the mother's physical condition, circumstances and closeness to the child, and strain family relationships. At least this is what survivors of depression say after giving birth.

The results of interviews with survivors of postpartum depression stated that postpartum depression symptoms can occur in early pregnancy, a few weeks after giving birth, or up to a year after the baby is born. When experiencing postpartum depression, a person will experience the following symptoms:

- Crying constantly.
- Easily irritated and angry.
- Feeling restless for no apparent reason.
- Experiencing drastic mood swings.
- Feeling tired or weak.
- Difficulty thinking clearly, concentrating, or making decisions.

- Not being able to sleep (insomnia) or sleeping too long.
- Loss of appetite or eating more than usual.
- Does not want to socialize with friends and family.
- Loss of interest in activities he used to enjoy.
- Desperate.
- Thinking of hurting herself or her baby.
- The emergence of thoughts about death and suicidal thoughts.

Interpretation of criteria from research indicators needs to be done considering that the respondents faced are mothers who by purposive sampling are determined as mothers who have or are experiencing postpartum depression, thus the possibility of the distribution of respondents' disciplines is very wide, so language that is easily understood by respondents is needed.

2.2. *Comfort Space for Mother*

Comfort space can be achieved by paying attention to the architectural concept and its constituent elements [10]. The elements of architecture can be explained [11][3]:

1. Building mass
It is interpreted as a form of house. For example, the shape of a cube, cuboid, cylinder, etc., this is also related to sharp angles, 90' (normal) angles, obtuse angles or no angles.
2. The shape of the building plan
It is interpreted as the shape of the base of the building in space, such as square, rectangle, circle, and trapezoid.
3. View of the building.
It is interpreted as the facade of the building.
4. Structural system used.
It is interpreted as a high wall structure or high ceiling.
5. Building land that has been processed.
It is interpreted as the processing of a residential building located on a piece of

land inhabited by a postnatal woman.

6. Space organization.

It is interpreted as the types of space programs needed by postpartum women.

7. Circulation

It is interpreted as the relationship between the spaces inhabited by postpartum women, and their access and circulation.

8. Building materials.

It is interpreted as the type of building materials, colors and furnishings in the space.

Architectural elements can help change the mood of the occupants [4]. In this case, psychologically, architecture can be one of the factors that help cure mental problems.

The building where the woman after giving birth lives can be given a wide opening, especially in the bedroom or the area that is used the most by the woman. The goal is the sun can refract the light to the room. Research proves that sunlight can evoke a sense of human spirit. Another goal is making air can easily circulate through the room, so that the air in the room is always fresh, this affects woman's mood [3].

Plants in the house can help woman feel better, because plants, especially green ones, have fresh colors that can affect woman's feelings [3]. Then green plants produce oxygen which is very good for woman's physical health, and plants also make the house feel fresher, because plants have heat-absorbing ability.

3. Results and Discussions

There were fifty four respondents for this research. Those respondents were survivors of postpartum depression. There were twelve criteria that given to them, they gave point to each criterion with Likert style question. And all of the answers were analyzed at the statistic program using SPSS version 26 to find the amount of factors and the tendency of the scatter.

The twelve criteria were:

1. There are corners in the room that is usually occupied by mothers.
2. There is a wide opening in the room that is usually occupied by mothers.
3. There is a bathroom close to the room that is usually occupied by mothers.
4. There is an empty private space in the house
5. There is sunlight in the room that is usually occupied by mothers.
6. Mothers have a private garden in the house
7. The mothers have a separate private room by the baby
8. The walls in the room that are usually occupied by mothers are not plain and have feminine motifs.
9. The wall in the room that mother used to live in have a calm and feminine color.
10. The room that is usually occupied by mothers has high ceilings and roofs.
11. The room that mother used to live in has a feminine floor color
12. The room that used to be occupied by mother has furniture with feminine colors.

From twelve criteria, we reduce it become eleven, because there was one criteria that has value of *anti-image matrices* that below than 0,5. That was private garden criteria. So, that criterion was eliminated and rerun the analysis.

KMO and Bartlett's test shown that *Keiser Mayer-Olkin Measure of Sampling Adequacy* more than 0,5 and the value of *significancy* below than 0,5. It is shown by Figure 1. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.744
Bartlett's Test of Sphericity	Approx. Chi-Square	134.534
	df	55
	Sig.	.000

Source: (the result of analysis, 2021)

Figure 1: KMO and Bartlett's Test

The result of extraction at rotation component of matrix shown by Figure 2. Rotated Component Matrix.

	Component		
	1	2	3
room corner	-.171	.827	.052
wide opening	.717	-.197	-.030
close to bathroom	.459	-.389	-.451
privat space	.127	.714	.333
sunlight	.831	-.039	.152
saperate baby room	.197	.101	.796
pattern walls	.297	.665	-.142
feminine color walls	.773	.184	-.201
high ceiling	.849	.155	.110
feminine floor color	.792	.175	.068
feminine furniture	.457	.321	-.379

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 5 iterations.

Source: (the result of analysis, 2021)
Figure 2: Rotated Component Matrix.

As shown by Figure 2, they were divided into three factors. First factor consist of wide opening (criteria 2), close to bathroom (criteria 3), sunlight (criteria 5), feminine color walls (criteria 9), high ceiling (criteria 10), feminine floor color (criteria 11), and feminine furniture (criteria 12). Second factor consist of room corner (criteria 1), private space (criteria 4), and pattern walls (criteria 8). The third factor only consists of criteria 7, separate baby room.

Factor one was all about feminine concept that applied at the space of postpartum woman, factor two was about the privacy concept at the woman's space, and the factor three was about self-care concept that applied to the woman's space.

4. Conclusion

This research found that comfort space for depressed woman after giving birth could be affected by three factors, first factor is feminine concept, second factor is privacy concept and the last factor is self-care concept.

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