

Bedroom Design Preference by Women who Just Giving Birth to Reduce the Symptoms of Mental Disorder

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ABSTRACT

Architecture can change human lifestyle; architecture can also change people's moods. Therefore we need an architectural design that is comfortable for its users. As for women who have just given birth, who are medically proven to have a high risk of mental disorders, they need a comfortable sleeping space based on their preferences. This study seeks to find a comfortable bedroom design for women who have just given birth to avoid mental disorders. This research is a quantitative research using descriptive statistical analysis. The results of this study indicated that these women prefer bedrooms with wide windows, angular floor shapes, bright floor colors, bedrooms that have ceilings and lastly, brightly colored ceilings.

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1. Introduction

Architecture is related to humans and also closely related to their various ways of life. Different styles and ways of human life can create different architectures. But there is also the possibility that architecture itself can change human life and style, including affect to heal a disease. Women have the nature of giving birth and breastfeeding, and at these times women are vulnerable to experience mental illness called baby blues, postpartum depression, or puerperal psychosis.

At first it was known that around 30% (thirty percent) of postpartum women experienced postpartum depression [1], but during the current pandemic it is known that about three out of five postpartum women experience mental illness [2]. This mental illness must be treated so as not to cause a more severe disease called puerperal psychosis or also commonly referred to as psychotic depression, this depression can cause death in the woman and her baby, and 70% (seventy percent) of the

causes of death are infanticide, and suicide [3]. Therefore, it is necessary to have medical and non-medical efforts in treating and curing postpartum women.

Non-medical efforts that can be done are to provide strong support to mothers and babies. The dwelling or space occupied by these women can affect their lives and habits, so the idea was sparked to create a space design that can support daily life and help reduce symptoms of depression in postpartum women.

There are three general forms of postpartum disease, namely the baby blues, postpartum depression, and the last one is puerperal psychosis. These three things have differences in prevalence, clinical symptoms and circumstances. Non-psychotic postpartum depression or commonly referred to as the baby blues is the most common condition that occurs in postpartum women [1].

The effects of postpartum depression on a mother affect the condition of her family, and her children and make this an important

condition to be diagnosed, treated and prevented. Untreated postpartum depression can have long-term adverse effects on a woman and even her family. Women who have experienced postpartum depression do not rule out the possibility of recurrent depression that is even more chronic. For infants, depression experienced by a mother can contribute to influencing emotional, behavioral, cognitive and interpersonal problems later in life

This disease can endanger the sufferer if there is no medical or non-medical treatment that carried out. One of non-medical treatment is from an architectural point of view, a feeling of secure and support for mental illness sufferers can be provided through a comfortable room that is appropriate to the patient's condition.

Room that always been used by the women is the room where the babies sleep and doing every baby activity.

2. Material and Methods

House that appropriate will help women reduce the symptoms of postpartum depression. Architecture is the most related thing in housing to be repaired in order to cure their postpartum depression symptoms [4]. Architecture cannot be separated from the architectural elements in it.

Room in home that usually used by mother is bedroom or the space where the baby lay on. Most of them put the baby at their own bedroom. That is why bedroom becoming the special space that need to be very comfortable for them.

2.1. Elements of Room

Architectural space has elements that are important to form the space as a whole. The elements that make up the space consist of several components that stick together and become one with the space and function to limit the room. The elements that make up space are not only solid components that can be seen with the naked eye but also can be in the form of voids that are not visible to the eye. These elements are horizontal and vertical elements. Horizontal elements consist of lower horizontal elements and upper horizontal elements.

The bottom horizontal element is an element that must exist as a foothold, while other elements do not have to exist. The bottom horizontal element can form a space with differences in material or color differences or also differences in texture, shape, pattern and the like. The top horizontal element can be a

ceiling, a roof or anything that limits the space at the top.

The next element is a vertical element, this element also has various types, not only walls made of brick, but can also be just columns or even air which is commonly called outdoor space [5].

The residence consists of several spaces that are connected either directly or indirectly, and consists of several zones, such as private or semi-private zones and so on.

2.2 Comfortable Bedroom

The physical space and environment in the shelters of postpartum women have a major influence in preventing or even curing depression. As explained [4] that space affects the behaviour of its occupants, both positive and negative influences, the right residential design can have a positive effect on the occupants. In this case, it is hoped that the space in the postpartum women's residence can cure the depression they suffer from.

Occupancy does not only mean a treaded dwelling house, but occupancy means all kinds of occupied space or space that is used as a place to live. Other examples of housing apart from landed houses are apartments, condominiums, flats, or even hospitals, especially those that have been occupied for quite a long time.

The elements of a dwelling or a building are more complex than the elements of space. In a bedroom, it is necessary to clearly describe the vertical and horizontal elements, which are in Table 1.

Table 1: Bedroom Vertical and Horizontal Elements

Vertical	Horizontal
Wall shape	Floor Shape
Wall color	Floor Color
Wall opening	Ceiling Shape
-	Ceiling Color

Source: (Sari, 2022)

What is meant by the shape of the wall is how the shape of a space is seen from its walls, massive or invisible walls. Wall color has great effect for the women. Different colors can change the user's feelings of space, improve mood, can even treat burnout [6]. The wall opening can be a window or an open door, or even a bovenlicht.

The shape of the floor is how the angle of the floor, the finishing material and the vibe that the floor produces. The color difference caused by the floor will also affect the atmosphere of the room. Modern or traditional shaped of ceilings can affect the mood of room users, as well as the color that can affect the mood of the room.

This study is a quantitative study that aims to find a design of space that can be used by postpartum depression sufferers or communities who have similar goals. Data obtained from questionnaires distributed to the respondents by means of closed interviews. The data collection method used purposive sampling; the respondents were women who survived postpartum mental disorder and/or women who were experiencing postpartum mental disorder. The analysis used is descriptive statistical analysis.

The analysis carried out aims to produce a design of the bedroom space based on the preferences of postpartum women who experience or have experienced postpartum mental disorder.

Open interviews were conducted with medical experts specializing in mental health and behavioral architecture and medical architecture experts, and found variables that were verified by the experts. Then make a questionnaire and distribute it to 36 (thirty six) respondents. The questionnaire survey was conducted by means of structured interviews with respondents, considering that many respondents were unfamiliar with questionnaire sheets.

3. Results and Discussions

All of variables that found should be changed to be a questionnaire. For example, for the question about wall, it is asked if it is massive, could it be square, rectangle, or even curve or circle. All of the answers were analyzed by descriptive statistical analysis using a tool, namely SPSS. The answers were spread into scatters. There were 11 (eleven) questions that become scatters. The eleven questions shown at the Table 2

Table 2: Definition of the Question Codes

Code	Definition
P1	Wall shape (massive or invisible)
P2	Wall that has angular shape

P3	Wall that has no corner
P4	Wall color (bright, ex: green, pink, yellow)
P5	Wall that has wide window (or opening)
P6	Floor that clean
P7	Floor mat is irregular
P8	Floor mat is square or rectangle
P9	Floor color is bright
P10	Upper room has any ceiling
P11	Ceiling color is bright

Source: (Sari, 2022)

All of the answers were analyzed and shown that P5, P8, P9, P10 and P11 are the answers about the comfortable bedroom from survivor’s perspectives. The scatters shown by Figure 1. Cartesian chart.

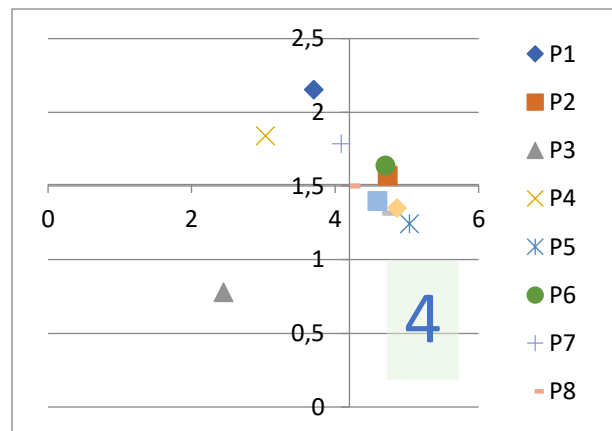


Figure 1. Cartesian Chart (Sari, 2022)

- P5: Wall that has wide window (or opening)
- P8: Floor mat is square or rectangle
- P9: Floor color is bright
- P10: Upper room has any ceiling
- P11: Ceiling color is bright

Those codes were in the 4th quadrant, and being in that quadrant means that the respondents' answers to these questions tend to be high in agreement with variations in deviations that tend to be low. This means that the agreement is dominated by quadrant 4.

The respondents prefer wide windows at their bedroom; they said that it was very stuffed to be in the room all the time with their baby, and because they have difficulty getting out of the house, so they prefer rooms that have large openings, so they able to bring the outside area into their room.

Respondents also prefer floors that have a square base over an irregular shape, some reasoning that the irregular shape of the floor mat looks complicated and disturbs the mood. However, the color of the floor should be bright. Respondents prefer bright colors compared to non-bright colors. As mentioned by [6] that bright colors like green, pink and yellow can reduce burnout. They also think that bright colors can improve their mood.

The respondents also prefer bedrooms that have ceilings; they said that by using a ceiling, their feelings of insecurity will be slightly reduced. Many of them think that bedrooms without ceilings are very vulnerable to the appearance of small animals such as insects, and they think it will be very dangerous for their babies.

As mentioned earlier, they prefer bright colors. This causes the choice of a bright ceiling as the agreed answer that can make them feel more comfortable. This is also in accordance with what was conveyed by [7] that most of postpartum women prefer bright houses colors such as green and pink.

4. Conclusion

Bedroom is the most comfortable room for a mother who just giving birth, because there where the baby sleep and do most of their activity, then they try to describe their comfort bedroom to reduce the symptom of mental disorder. Because, women who just giving birth has a lot of chances to get mental diseases, such as baby blues, postpartum depression, or puerperal psychosis.

From eleven elements that found, they tend to choose five of them that can make them happier, or feel less sad. They are the bedroom has to has wide windows, the floor mat should be square or rectangle and they should have bright colors. Bedroom should has any ceiling, and those ceiling should have any bright colors.

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References

- [1] Bodnar, D., Ryan, D., & Smith, E. J., (2021). *Self-care Program for Women with Postpartum Depression and Anxiety*, www.bcwomens.ca, Provincial Reproductive Mental Health.
- [2] Sari, Yeptadian. (2021). *Arsitektur untuk Ibu Depresi: dari Sudut Pandang Penyintas Depresi Pascapersalinan*. Arsitektur UMJ Press: Jakarta.
- [3] Stewart, Donna, et al. (2003). *Postpartum Depression: Literature Review of Risk Factors And Interventions*. Toronto: University Health Network Women's Health Program, Department Of Mental Health And Substance Abuse, World Health Organization.
- [4] Sari, Y., Satwikasari, A. F & Faliha, A. M. (2020). The Concept of Feminism Architecture in houses to Reduce Postpartum Depression Symptom. *Proceeding of The 4th Bogor International Conference for Applied Science*. Pg 34-37..
- [5] Rifqi, A. A., Handajani, R. P., & Sujudwijono, N. (2015). Elemen Ruang Dalam Pada Fasilitas Rawat Inap Pasien Gangguan Jiwa Berdasarkan Aspek Keamanan. *Jurnal Mahasiswa Jurusan Arsitektur Universitas Brawijaya*, vol. 3, no. 1, 2015.
- [6] Alkathiri, A. T. B & Sari, Yeptadian. (2019). Pengaruh Warna Terhadap Produktivitas Karyawan Kantor. *Purwarupa Jurnal Arsitektur Vol. 3 no. 3 Tahun 2019*. Hal 187-192.
- [7] Sari, Yeptadian and Nursandi, Izwan Ariq (2022). Comfort Space for Depressed Woman after Giving Birth: The Enticing Factors. *Proceeding of The First International Conference on Engineering, Construction, Renewable Energy and Advanced Materials 2021*.