

DOI: <http://dx.doi.org/10.33846/hn41002>
<http://heanoti.com/index.php/hn>



RESEARCH ARTICLE

URL of this article: <http://heanoti.com/index.php/hn/article/view/hn41002>

Maternity Room Action Innovation with “Sayyidah Maryam”

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ABSTRACT

Background: Childbirth is an unforgettable experience for women. Every woman wants a happy, healthy, comfortable pregnancy and childbirth experience. From the research, it was found that the environment is the biggest factor in the healing process in medical facilities, namely 40%. But unfortunately the environment that is formed by the existing maternity homes actually gives pregnant women fear, anxiety, boredom, and stress. Midwives as caregivers during childbirth should understand not only to pay attention to the medical needs of women giving birth but also to the psychological and emotional needs during the labor phase. Therefore, innovations regarding the development of delivery rooms and how to design delivery rooms that pay attention to the well-being of mothers and fetuses need to be developed. The delivery room design innovation was developed using the Sayyidah Maryam concept. The concept is the main formulation in the formation of scientific ideas inspired by Sayyidah Maryam binti Imron, a holy woman, the mother of the Prophet Isa Alaihi Salam, one of the role models for Muslim women. **Purpose:** to develop innovative delivery room designs that pay attention to the welfare of mothers and fetuses with the concept of Sayyidah Maryam. **Methods:** Innovation development research was carried out by means of research development. **Results:** The 3D image design and animation video embodiment of the innovative concept of the delivery room action room, the Sayyidah Maryam method based on literature and experimental tests, can increase the comfort of mothers spiritually and psychologically in the delivery process.

Keywords: delivery room; action room; Sayyidah Maryam

INTRODUCTION

Background

Childbirth is an experience of every women that will never be forgotten. Every woman wants a happy, healthy, comfortable pregnancy and childbirth experience. However, childbirth is a condition full of discomfort that makes women afraid, anxious and even stressed when facing childbirth. From the research, it was found that the environment was the biggest factor in the healing process in medical facilities, which was 40%. But unfortunately, the environment that is formed by the existing maternity hospital actually gives fear, anxiety, boredom, and stress to pregnant women⁽¹⁾.

Knowledge of evidence-based health care design has grown rapidly in the last decade, supporting the argument that more knowledge is needed about the effects of birth-environment design and hospital design in general.⁽²⁾ Research from Australia and the UK has shown that the birth environment affects not only the experience of delivery and delivery outcomes for women and neonates, but also on birth support and maternity care for these women⁽²⁾.

It has been hypothesized that the design of the birth environment could influence delivery outcomes by altering the release of certain neuronal hormones during labor if the space is deemed highly stressful. Birth is a complex process that relies on the release of the endogenous hormone oxytocin to trigger contractions. In labor, endogenous oxytocin also increases the pain threshold and has antidiuretic effects.

The delivery room, the problem is the waiting room for delivery which is usually massive and only limited by curtains. This makes pregnant women stress because they have to hear the screams of pain from other pregnant women. In addition, medical personnel who handle them also feel the same stress because they are required to stay calm in very stressful conditions. Delivery patients also feel the same way, because they have to wait outside together with other watchmen, the worst thing that happens is when there is an unpleasant incident with one of the watchmen, other waiters who have not received news about the labor process that are taking place can become anxious. anxiety, fear, and stress because they don't know what is going on with the mother and the baby^(1,3).

The delivery room design innovation was developed using the Sayyidah Maryam concept. Concept is arrangement in the formation of scientific ideas inspired by Sayyidah Maryam bint Imron, a holy woman mother of the Prophet Isa Alaihi Salam, one of the role models for Muslim women⁽⁴⁾.

Maryam's birth is a concept of giving birth to teach Tauhid to mothers who give birth. Effort to face the pleasure of labor pain with the intention of going to Jihad to Allah SWT. The pain that is felt during childbirth becomes a means of worship to Allah SWT by always doing dhikr, Allah SWT is the ruler of everything in heaven and on earth⁽⁵⁻¹⁰⁾.

Snoezelen method is a concept from the Netherlands, started in the 1970s as a recreational activity for people with severe disabilities, involving and creating an indoor environment using controlled stimuli to increase comfort and relaxation. Special rooms designed to expose the user to multiple sensory stimuli combining vision, touch, sound and smell. The purpose of the snoezelen concept is to stimulate positively the senses (visual, auditory, tactile, olfactory and gustatory stimulation) with different materials in a multi-sensory stimulation room or in a snoezelen room⁽⁵⁾.

A traditional Javanese touch in a concept developed by adding a touch of the traditional Javanese island in the delivery room design. Javanese culture is a reflection of the Javanese human mind which includes the will, ideals, ideas, and enthusiasm in achieving prosperity, safety, and happiness in life physically and mentally⁽⁶⁾.

Purpose

A safe, secure and comfortable environment is an essential prerequisite for providing optimal health care. However, the environment can be experienced differently by the patient / client. Technically sound health care facilities, for example, provide a sense of security for some while for others it can lead to feelings of isolation and a reduced sense of self-determination⁽¹¹⁾. Thus, for optimal safety, health and efficiency, the care environment must be adaptable enough to meet the unique needs of patients and their colleagues⁽¹²⁾. Physical design aspects like a single room, good ventilation, window, conditions that promote orientation and distraction, scenery or access to nature, real or artificial, and ergonomic furniture all can have positive health effects. Psychological dimensions like that as staff with a willingness to help, promote integrity, convey a sense of security and trust through more people-centered care as well as improve patient / client health. The following aspects that contribute to a supportive care environment in which it is possible to experience ease have been identified in the tentative theoretical construction: experiencing a genuine welcome; recognize yourself in the space provided; creating and maintaining social relationships; experiencing a willingness to be served and cared for; and experience security⁽¹³⁾.

Mechanisms of environmental influence on birth Labor and delivery are innate, biological, instinctive processes that were always, and still are, associated with certain risks.. Therefore, mother mammals always instinctively choose to give birth in an environment that is considered safe, protected and private. When a woman in labor arrives at the hospital, factors such as loud noise, light and a strange and hostile environment increase the activity of some parts of the brain cortex and amygdala that signal danger, and the body's stress and defense systems are activated. This causes inhibition of oxytocin release and / or increased sympathetic nervous system activity. As a result, labor contractions can become too strong and painful, or even stop, leading to medical intervention, as seen in the high rate of labor augmentation with synthetic oxytocin⁽¹⁴⁾. The opposite is also true; if the cortex and amygdala perceive the environment to be safe, harmless, friendly and inviting, this leads to physical and mental relaxation and a decreased response to fear and stress. This results in more effective labor contractions and good uterine blood circulation, which positively affects the progress of labor, increases fetal oxygenation, and prevents postpartum hemorrhage. Touch, warmth and closeness also promote the release of oxytocin and lower stress levels. Women will remember and be affected by labor and birth events throughout their lives. Women who feel safe and who can open the flow and rhythm of labor can be strengthened, but the experience can also leave a negative impression^(7, 10, 13, 15-18).

Non-empathic treatment by a health care professional and a threatening or overly medical environment of labor can leave a negative impression. Negative experiences of childbirth can lead to ill health in women, such as post traumatic stress disorder, depression, constant fear of childbirth^(13, 17), delaying the next pregnancy⁽¹⁹⁾ and demands for future birth operations⁽²⁰⁾.

Therefore, innovations regarding the development of delivery rooms and how to design delivery rooms that pay attention to the well-being of mothers and fetuses need to be developed. The delivery room design innovation was developed using the Sayyidah Maryam concept. The concept is the main formulation in the formation of scientific ideas inspired by Sayyidah Maryam bint Imron, a holy woman who is the mother of Prophet Isa Alaihi Salam, one of the role models for Muslim women⁽⁴⁾.

The research objective was to develop an innovative design of the delivery room action room that pays attention to the welfare of the mother and fetus with the concept of Sayyidah Maryam.

METHODS

Innovation development research was carried out by means of development research, a development research method which contains 3 main components, namely development models, development procedures, and product trials. The conditions during the Covid-19 pandemic led to changes made by researchers, namely

conducting several face-to-face meetings with paid attention to health protocols and several meetings were held online.

The development model was carried out using existing literature reviews and evidence based that supports the concept. Developed procedures based on evidence based results obtained to mix and match Maryam's delivery method, snoezelen method and traditional Javanese touch in the delivery room action room.

The theoretical model submission compiled by the research team was carried out by expert tests on architectural and civilian experts as well as midwife practitioners which were carried out online. After obtaining the results of the discussion and revision of the agreed model form, a trial was carried out through the results of the prototype and design simulation video back to the experts.

RESULTS

The health care environment in relation to birth is inadequately studied. A systematic review by our study group (unpublished), with searches of ten databases in December 2016 and August 2017, showed that a birthing room that provides comfort using controlled stimulation can provide disruption of labor pain, comfort, control and safety,⁽²¹⁾ and has a positive effect on duration of labor and intensity of pain. A sense of familiarity has a positive impact on feelings of control, ownership of space, and behavior in building a nest for women and their labor partners^(18, 22), while unusual feelings distract a woman during childbirth. These findings clearly show that design aspects of delivery spaces can influence delivery outcomes and influence women's decisions about future modes of birth⁽²³⁾. Our review indicates that there is a lack of scientific studies of sufficient quality on the effects of the delivery room itself.

A pilot RCT in Canada found that it was feasible to perform an RCT comparing a more flexible delivery space with a regular delivery space, and that fewer women who delivered in a flexible delivery room received synthetic oxytocin for contraction augmentation. The authors recommend a complete RCT, but at the start of the planned study, no full-scale RCT was reported. We have found two ongoing RCTs that compare tailor-made care in the delivery room with treatment in the usual room. A single center study in Denmark examined whether a delivery room designed and decorated specifically to minimize stress had an impact on birth outcomes and the birthing experiences of women and their partners. One of the existing delivery rooms has been rebuilt using wood materials, non-clinical furniture such as at home and a wall projector with a natural view combined with music and natural sounds. The RCT plans to include 680 nulliparous women randomly allocated to reconstructed or regular delivery rooms⁽²⁴⁾.

An ongoing multicenter study across 12 labor wards in Germany will evaluate whether a redesigned delivery room that facilitates mobility and upright positioning, coping with pain and personal comfort will result in a higher likelihood of vaginal delivery in the hospital. The environment in the intervention room has been reimagined with special features and equipment, such as beds hidden from view by screens or curtains, mattresses on the floor, foam elements for support, bean bags and posters depicting an upright position. position, and a monitor that shows natural movies with natural sound and music. This study will involve 3800 women and give birth normally as the main outcome⁽¹⁶⁾.

Projected 3D Image of Sayyidah Maryam's Maternity Room Action Room



Figure 1. Action Room



Figure 2. Action Room

DISCUSSION

During labor Maryam began to feel a sensation that slowly but surely got stronger. The feeling that forced Maryam to stop her steps and lean on the date palm tree. Maryam leaned on her weaker body. The intense pain almost made him despair. The state of being away from her family, pregnant without a man and feeling the intense sensation before childbirth that almost destroyed her confidence, she asked for death. "Then the pain of giving birth to a child forces him (to lean) on the base of the date palm tree, so he said: Ouch, it would be nice for me to die before this, and I became something insignificant, again forgotten." Honest prayer describes his sadness, prayer that describes his sadness. Allah gives the gift of feeling it is not without meaning. Know that that feeling will convey closeness to Him. Remember that feeling is a gift, a gift for a woman. The feeling of contraction makes the birth canal open, as does the heavenly door. Prayers for women before childbirth will immediately open the doors of the sky, deliver prayers to Allah SWT. MasyaaAlloh, Prayer is like a request for a mujahid. Because the mother is a mujahid who is really trying to give birth to a successor to the sahih. So, accept pain as a gift. Beautiful gift from Allah SWT, thankful for the extraordinary taste. In a sense of His gift. Prayers for women before childbirth will immediately open the doors of the sky, delivering prayers to Allah SWT. MasyaaAlloh, Prayer is like a request for a mujahid. Because the mother is a mujahid who is really trying to give birth to a successor to the sahih. So, accept pain as a gift. Beautiful gift from Allah SWT, thankful for the extraordinary taste. In a sense of His gift. Prayers for women before childbirth will immediately open the doors of the sky, delivering prayers to Allah SWT. MasyaaAlloh, Prayer is like a request for a mujahid. Because the mother is a mujahid who is really trying to give birth to a successor to the sahih. So, accept pain as a gift. Beautiful gift from Allah SWT, thankful for the extraordinary taste. In a sense of His gift ⁽²⁵⁻²⁷⁾.

One of the positive effects of contraction is the presence of the hormone serotonin which helps reduce anxiety. The potassium hormone helps to enjoy alternating pain sensations and stabilizes blood pressure. The hormone bradykinin can feel comfortable even though you are feeling the peak of the pain sensation and it helps to overcome pain into a form of gratitude and pleasure. The hormone histamine helps the mother nourish digestive function, all physiologically naturally occurring hormones are only a part of the many currently detected to help the birth process. Gratitude is an acknowledgment of the gift of the Most Giver ^(9, 25-27).

Best position before delivery. Maryam leaned against the base of the date palm, leaning back to release her tiredness. The meaning of leaning: the back that rests indirectly will continuously press the nerve points on the spine. The rough surface of the date palm will help massage the back area. The reclining or half-sitting position helps lower the fetal head to reach the pelvic floor. The force of gravity will help the process of fetal descent. This half-sitting position can be varied in various ways, for example, squatting / sitting cross-legged / crawling. Being active in changing positions will help in the process of lowering the head. The low place also illustrates how a childbirth helper guides mothers who give birth. The use of a soft voice with a low tone of voice, gentle guidance will be more easily accepted by the heart. The soft tone of voice will help the mother achieve relaxation so that she can enjoy all the flavors. In the story of Maryam, Jibril's arrival brings calm to Maryam. And calm is what helps the birth process run smoothly, and that's how the oxytocin hormone system works. When the mother surrenders to Allah SWT sincerity for what she experiences and is grateful for His gift (perfect belief), that's when the labor process can run smoothly. Interpretations of the delivery room from Maryam's delivery include: the room is designed full of tranquility, splashing water, the back is like a date palm, a low design, cool maternity bed, a series of calligraphy from the word of Allah SWT, mural music, the color of the holy room is applied in white,

the spacious room, a compassionate professional childbirth assistant and assistant, the back stands like a date palm, comfortable seating⁽²⁸⁻³⁰⁾.

Snoezelen method is a concept from the Netherlands, involving and creating an indoor environment using controlled stimuli to increase comfort and relaxation. Special rooms designed to expose the user to multiple sensory stimuli combining vision, touch, sound and smell. The purpose of the snoezelen concept is to stimulate positively the senses (visual, auditory, tactile, olfactory and gustatory stimulation) with different materials in a multi-sensory stimulation room or in a snoezelen room. The interpretation of the delivery room from the Snoezelen Method includes: a fresh, fragrant room, unique and bright lights, soothing music, privacy⁽⁵⁾.

A traditional Javanese touch in a concept developed by adding a touch of the traditional Javanese island in the delivery room design. Javanese culture is a reflection of the Javanese human mind which includes the will, ideals, ideas, and enthusiasm in achieving prosperity, safety, and happiness in life physically and mentally.. Interpretations of delivery rooms from traditional Javanese touches include: typical brown kasik colors, classic carvings or wood calligraphy carvings in the room. Redesign of the delivery room is an indication that redesigning the delivery room can have a positive impact on VB levels. However, statistical power was lacking in the two relevant studies⁽³¹⁾. In two single center RCTs, views of nature on television and soothe audio-visual stimuli during labor had a positive effect on perceived quality of care, Apgar score of 5 minutes and pain intensity⁽¹⁵⁾.

CONCLUSION

The combination of the Sayyidah Maryam childbirth concept, the snoezelen method and traditional Javanese touches can be a solution to improve a conducive environment and provide psychological and spiritual comfort. Because the environment is formed by everyday environmental phenomena that make the mother not too unfamiliar with the environment where the delivery process is carried out. This is supported by the placement of furniture that is also not far from the daily habits that have been done by the mother, such as the usual bed used by the household (not a medical bed).

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