Safe delivery: Concept Paper

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ABSTRACT

Safe delivery is important in reducing maternal and neonatal morbidity and mortality rates worldwide. Studies have shown that there is no clear definition of what safe delivery.

OBJECTIVE

The objective of the concept analysis was to provide an in depth description of what Safe Delivery means by assigning antecedents and attributes to the concept.

METHODOLOGY

The concept analysis of safe delivery was done using Walker and Avant concept analysis model. Eight articles were reviewed to define Safe Delivery.

RESULTS

The antecedents of Safe Delivery are maternal age, socio economic status and women empowerment which standout. The attributes of Safe Delivery are a viable pair of mother and baby. Reduction of maternal and infant mortality and well being of the mother child were evident in this concept.

CONCLUSION

The analysis of the essential attributes, its antecedents and consequences made it possible to define the concept of safe delivery.

INTRODUCTION AND BACKGROUND INFORMATION

Giving birth is a life changing event and the care that a woman receives during labour has potential to affect the mother physically and emotionally. It is necessary and essential to ensure mother and newborn have the safest care possible.

Safe delivery is important for reducing maternal mortality and morbidity. WHO (2015), defined childbirth as a complex and sometimes difficult process. It is well documented that safe delivery can minimize intra partum and post partum complications thereby reducing maternal and neonatalmorbidity and mortality and improving child survival rate.

Of the approximately 130 million births that take place each year, an estimated, 1.2 million intrapartum-stillbirths occur, and nearly 350,000 mothers die from problems related to childbirth. The major causes of maternal and newborn mortality are postpartum hemorrhage, infection, obstructed labor, and hypertensive-related disorders and for babies, these are infection, intrapartum-related mortality, and complications related to prematurity. In order to prevent childbirth-related deaths, skilled attendance at each and every childbirth has emerged to be a global priority according to Spector et al.,(2013)

Wanjira et al., (2011) said worldwide 500, 000 women die from childbirth complications every year and survivors of these complications remain with health problems. It is estimated that 50 million women suffer adverse consequent event of childbirth.WHO,(2018) said reducing childbirth-associated mortality is a top global health priority but simple, effective methods to achieve it are severely lacking. Most of the 350,000 maternal deaths, 1,2 million intrapartum-related stillbirths, and 3,1 million neonatal deaths that occur each year could be avoided through the delivery of timely interventions proven to be effective and affordable, UNICEF,(2018).

It is estimated that in 2015, about 303 000 women died during and following pregnancy and childbirth and almost of these deaths occurred in low resource setting and could have been prevented WHO (2018).

Childbirth in USA is the sixth leading cause of death for women between ages of 20 and 35 years. Sub Saharan Africa has the highest rates of early childbearing which increases the maternal and neonatal mortality rates WHO (2018).

Globally 2,6 million children died in the first month of life in 2016. Approximately 7,000 newborn dieevery day in the first week, with 1 million dying on the first day and close to 1 million dying within the first 6 days of life according to UNICEF,(2018). The same statistics state the one million babies take their first and last breath on the day there are born, 80% of these deaths are a result of complications of childbirth and some of the complications are not noted by midwifes.

With the adoption of sustainable development goals in 2015 which established targets for improving child survival by 2030 the optimal intervention is having Safe Delivery for the mother and neonate UNICEF,(2018).

Delivering at a health facility is essential to ensure that women receive quality care this is essential to ensure delivery is carried by a skilled personal capable of anticipating or detecting signs and symptoms of complications UNICEF (2018).

According to Kruk and Prescott,(2012) in eastern Europe and central Asia 97% of birth occur at a health facility while in Western Europe 99% occur at health facility, Latin America and the Caribbean women 94% deliver at a health facility and East Asia women 90% do so also. In contrast Sub Saharan African where burden of maternal and neonatal death is the highest, only 56% women delivery at health facility. Therefore, maternal and neonatal mortality is a global concern, and great effort should be done to minimize these deaths, as most are preventable. These efforts should be done to combat damage against women and also to qualify obstetric care sothat maternal and neonatal outcomes correspond to expectations, ensuring a safe delivery for pregnant women.

In the last half of the 20th century there has been a lot of advancement in medicine to make birth safer for the women and their neonates. As midwifes we know what makes birth safe for women and their babies but standard maternity care does not reflect this knowledge. Survival is not a birthing woman's need but it is also her human right so there is need to understand and define what is safe delivery is to ensure that women and their neonates survive childbirth.

Prior to undertaking this concept analysis the researcher believed safe delivery is unassisted vaginal delivery irrespective of preceding intervention like episiotomy. The researcher saw that there is no clear definition of what safe delivery means. It is debatable as to who defines what

safe delivery is. It important that midwifes know and understand what safe delivery is so that they are able to manage complications.

Safe delivery has been defined mostly in one way by numerous people and organization," the presence of a skilled personal during childbirth". However safe delivery means different things to different people.

Safe delivery care is regarded safe when attended by a skilled birth attendant either at a health facility or home according to, Bhandari and Dangal,(2014).Childbirth is safest in the hands of skilled and trained birth attendants as both mother and child receive the necessary care and attention.

I would say a Safe Delivery is when a woman delivers a baby vaginally by herself with some encouragement from a health worker and support people and with minimum pain and the baby and mother are healthy afterwards. Safe delivery is reliant on level of stress experienced by a woman and staff around her, stress influences the quality of communication with women and between staff.

AIM OF THE ANALYSIS

Safe delivery is a term that is used for many years by to indicate uncomplicated vaginal delivery which was attended by skilled personal irrespective of the intervention which was done to the women. However there is a narrow margin between safe and unsafe delivery.

The aim of this paper is to understand and define what safe delivery is and how it applies in the context of midwife care. It is therefore important that as midwifes we clarify the concept of safe delivery and reflect on its fundamental meaning in midwifery practice and this will help to develop an understanding of what is meant when birth is described as safe delivery.

Gould,(2000) argues that midwifes have failed to define normality and safety during childbirth and this has allowed domination and medicalistion of childbirth so that doctors then define abnormality.

As midwifes, there is need to develop an understanding of what is safe delivery and what it entails.

PROBLEM STATEMENT

From the researchers observation women are been bunched together as having had a safe delivery based on the mode of delivery only without consideration of other critical factors

associated with childbirth like intrapartum emotional distress or associated child birth risk factors like teen pregnancy or grand parity. This has led to multiple post partum complications that have compounded on maternal neonatal morbidity and mortality. In view of this, the care is erratic and incomplete hence the need to harmonize the definition for standardization of care in the immediate post partum period.

SIGNIFICANCE OF THE CONCEPT

Midwives play a critical role in maternal and child health. It is therefore important forMidwives to understand what safe delivery means so to enable them to avoid and manage complications. This concept will help to develop a tool and standardize care everywhere among nurse midwives. This concept paper will help to reduce maternal and neonatal morbidity and mortality rates.

PURPOSE OF ANALYSIS

The purpose of the paper was to clarify by providing an in depth description of the concept safe delivery in order to harmonize immediate post partum care among midwives.

LITERATURE REVIEW

Literature review of 15 articles was conducted for the period 2000 to 2018. The final sample selection was (n =8). Literature search was done from 9 July to 25 August 2018. The following search engines, Google Scholar and PubMed were utilized for literature Search.

AUTHOR/YEAR	SOURCE	DEFINITION	ANTECEDENTS	ATTRIBUTES	COMMENTS
Kruk et al 2012	American journal of public health	Part of the definition	Some	Some	Some key elements of the definition where lacking.
Adams et al 2006	Health care for women international journal	Part of the definition	None	Some	Antecedents are key in defining the concept and where missing.
Singh et al 2012	PloS One	Part of the definition	Some	Some	
Kabir et al 2012	Asia pacific journal of public healh	Part of the definition	Some	Some	
International conferderation of midwifes 2014	Website	Part of the definition	Some	Some	There is need to refine the definition
Fontenele et al., 2017	International medical society journal	Part of the definition	Most of them	Some	Key antecedents highlighted
Earl , 2004	Electronic database	Part of the definition	Some	some	
Gould, 2000	Journal of advanced nursing	Part of the definition	Most of them	All	All attributes defined

METHODS

Walker and Avant's strategic eight step method of concept analysis was used in analyzing the Concept of Safe Delivery. The steps include selection of a concept, determining the purpose of analysis, identifying all uses of the concept, determining the defining attributes ofthe concept, identifying antecedents of the concept, identifying the consequences of the concept, constructing a model case, and identifying the empirical referents of the concept(Walker & Avant, 2011).

DEFINITIONS OF THE CONCEPT

Dictionary meaning of birth is that it is a process rather than an event. It the act of giving birth.

Childbirth includes both labor (the process of birth) and delivery (the birth itself). It refers to the entire process as an infant makes its way from the womb down the birth canal to the outside world according to Medical Dictionary Online (2016)

Safe means something that is does not causeharm or danger according to Collins English Dictionary Online (2016).

Safe childbirth is a term is widely used these days but lacks of real definition. Although WHO has developed a safe childbirth checklist, its real definition is unclear. Safe delivery checklist as developed by the WHO,(2012) which includes delivery, conducted either in a medical institution or home deliveries assisted by doctor or nurse or other health professionals.

Eliminating multiple meanings for "safe childbirth" is necessary to refine the concept so as to promote desirable safe practice, minimizing the subjectivity of the practical context to safe childbirth.

Safe delivery is the provision of basic essential maternal health care and availability of trained personnel to attend women during labour and delivery whether birth takes place at home or health facility according to Bayou and Gacho (2013).

WORKING DEFINITION

According to the researcher safe delivery is a normal vertex delivery where the mother is delivered by a skilled heath personal in a sterile environment without any invasive procedures done and no complications or tears noted and delivered a viable neonate who is physiological stable. The mother should be psychological and physiological stable with minimum pain and anxiety have been noted and is well supported by health staff and family.

ANTECEDENTS

“Antecedents are those events or incidents that must occur or be inplace prior to the occurrence of the concept”. Merriam-Webster's Online Dictionary (2016) defined antecedent as something thatcame from something and may have influenced or caused it. Bothantecedents and consequences are helpful in refining the attributesfurther.

Cambridge English Dictionary (2016)defined antecedent assomething existing or happening before, especially as the cause of anevent or situation.

Walker and Avant postulates antecedents as preliminary events that should be present before occurrence of the concept of interest (Walker & Avant, 2011).These are evens that must occur prior to Safe Delivery.

In the context of this paper,safe delivery, the antecedents include maternal age, socio economic status, educational levels, and preconception care and women empowerment. They can also include religious, psychological and cultural factors, social support, comprehensive antenatal care and intrapartum care. Antecedents can also include Continuing education by health workers, trained professionals, professional knowledge about childbirth physiology by the health worker and Identification of risks or potential damage and continuous monitoring of the fetal heart rate.Singh et al.,(2012) highlighted women's age, education, husband education, mass media exposure and religion determine safe delivery in urban areas. Kabir et al (2015) also said likelihood of safe deliveries is significantly lower among young and older women than middle aged women and higher among educated women and those living in urban areas. They went on to say economically better off mothers and those with greater exposure to mass media have a higher incidence of safe delivery.

DEFINING ATTRIBUTES

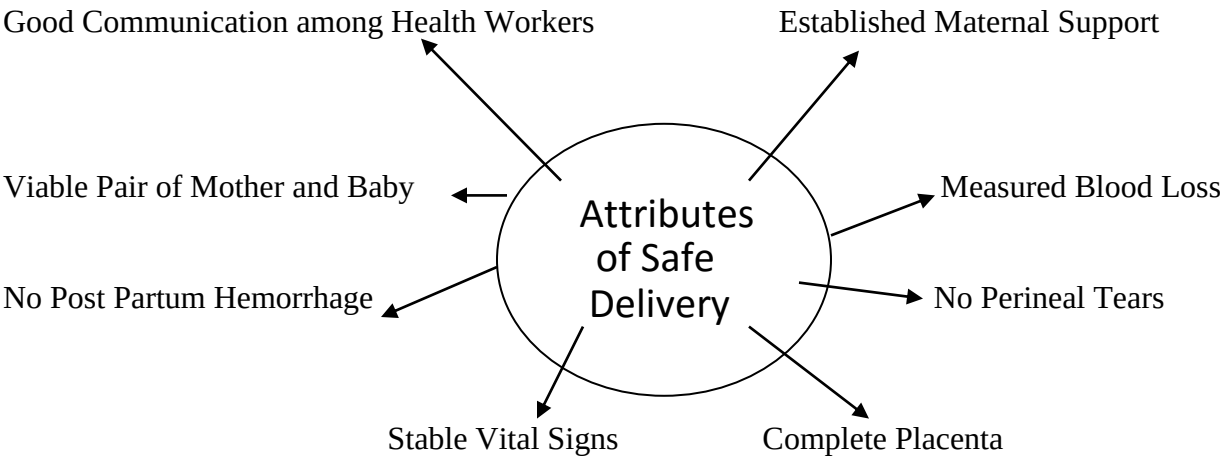
According to Walker and Avant, defining the attributes of the concept is the heart of concept analysis. Critical attributes are those characteristics that describe the concept of interest in a moretangible way (Walker and Avant, 2011). Attributes of safe delivery are viable pair of mother and baby; measured blood loss not estimated only. It is important to recognize excessive blood loss during childbirth, which is a significant cause of morbidity and mortality. Visual estimation of blood loss is so inaccurate even if it is continued to be used in practice (Schorn, 2010). However silent ischemia may occur in the presence of stable vital signs.

Other attributes are no post partum hemorrhage, no perineal tears, and stable vital signs at birth, complete placenta. There should be good communication among health workers. There should be established maternal support system and the woman should be psychological stable.

There is need for careful observations of maternal and neonatal vital signs after delivery to prevent any complications.

Lyndon et al.(2011),considered communication as important in childbirth care. Lack of communication affects safety aspects of childbirth and the improvement of communication

favors the establishment of safe delivery. Therefore, effective communication between team members and patients is one of the most reliable indications of safe care thus safe delivery. Delivery should be in line with the international standard checklist.The mother has to be psychologically stable and has experienced mild to moderate pain and is able to practice self care for herself and baby.



RESULTS

Initially fourteen (14) articles from year 2000 to 2018 were reviewed. Six (6) articles were later dropped due to their irrelevant information, and eight (8) articles were finally reviewed to define Safe Delivery.

CONCEPT ANALYSIS

Concept analysis is a process that aims to come up with defining characteristics or attributes of aconcept to facilitate an operational definition. The concept should be very clear and not vague. Theresearcher can choose or come up with a measuring instrument which is a precise reflection ofdefining characteristics of the concept. The concept analysis can be utilized to develop a theoryand for the purpose of research measurement (Walker & Avant, 2005).

The concept paper will use Walker and Avant concept analysis model (2011). Walker and Avant concept analysis steps are as follows: 1. Choosing a concept, 2. Specification of the aims of the analysis, 3. identification of concept utilisation, 4. Determination of defining attributes of the

concept, 5. Development of a model case, 6.defining a borderline case with similarities and differences from the concept, 8. Defining antecedents and consequences and defining empirical reference.

DISCUSSION

The definition of safe delivery varies according to the understanding of people. Midwives understand what safe delivery means and theirdefinition concurs with the WHO definition of delivery performed by a skilled person in a safe environment. This concept paper aims to define what safe delivery is.

Safe delivery has been widely used in maternal care. Midwives need to have knowledge on the physiology of childbirth so as to be able to carry out a safe delivery. The woman has to be of right age and educated so as to understand and be able to detect problems which might lead to safe delivery.

Safe childbirth is a term is widely used these days but lacks a more practical definition. Although WHO has developed a safe childbirth checklist, its definition is unclear. Safe delivery checklist as developed by the WHO (2012) which includes delivery conducted either in a medical institution or home deliveries assisted by doctor or nurse or other health professionals. Assigning the antecedents and attributes to the concept safe delivery is important in refining the concept so as to promote desirable safe practice, minimizing the subjectivity of the practical context to safe childbirth.

Safe delivery is the provision of basic essential maternal health care and availability of trained personnel to attend women during labour and delivery whether birth takes place at home or health facility according to Bayou and Gacho,(2013).Safe delivery has been defined mostly in one way by numerous people and organization," the presence of a skilled personal during childbirth". However safe delivery means different things to different health care providers.

Safe delivery care is regarded safe when attended by a skilled birth attendant either at a health facility or home according to Bhandari and Dangal,(2014).Childbirth is safest in the hands of skilled and trained birth attendants as mother and child receive the necessary care and attention

Kotsaka(2010), said safe delivery means spontaneous labour and remaining low risk throughout labour and delivery the infant is born spontaneously in the vertex position at 37 and 42 completed weeks of pregnancy and after birth mother and infant are in good condition. This definition does not mention interventions, pharmacological or otherwise.

Information centre of NHS in England (2004), defined Safe Delivery is without induction, without use of instrument, not by cesarean section and without general, spinal or epidural anesthetic before or during delivery.

Association of radical midwives (ARM), sited in Gould(2000) research defined Safe Delivery as purely normal physiological event with no interventions. ARM identified artificial induction of labour, artificial rupture of membranes, directed pushing and episiotomy as interventions as part of abnormal birth.

Definition of safe delivery flows with the fluidity of individual experience. Earl,(2004) in her master' thesis found that midwife definitions varied. Normal means with a reasonable amount of time with the woman remaining in control with a baby that's happy throughout the labour and delivery.

Safe delivery care is regarded safe when attended by a skilled birth attendant either at a health facility or home Bhandari and Dangal,(2014). Most health workers believe childbirth is safe when delivery is done by a skilled and trained birth attendant and the mother and child receive the necessary care and attention which prevents them from getting complications.

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International confederation of midwifes(2014) defines safe childbirth as a birth where the woman commences, continues and completes labour with the infant being born spontaneously at term, in the vertex position at term, without any surgical,medical or pharmaceutical intervention.

Fontenele et al., (2017) defined safe childbirth in their study as the set of care measures thatseek to identify risks, prevent damage and or complicationsduring delivery, ensuring maternal and fetal monitoring in favor of the welfare of motherand child. This definition is almost similar to the researcher's definition.

CASES

Both Chinn & Kramer (2011) and walker & Avant (2011) emphasize the importance of identifying critical attributes for synthesis of a concept analysis. Incorporating diverse casesallows for pertinent validation of the analyzed concept.

MODEL CASE

Walker and Avant stated, “A model case is an example of theuse of the concept that demonstrates all the defining attributes tothe concept”

A 25 year old woman reported in Labour complaining of mild abdominal and backache pain for the past three hours. She was accompanied by her husband. She was booked with the local antenatal clinic and had 4 ANC visit. She was a teacher by profession and works at a local school.She was admitted by Midwife X who examined her and found her to be 7cm on cervical dilatation

As the labour progresses the midwife performed non pharmacological pain management of back massage to relieve pain. The woman’s partner was an active participant also in providing massage to the woman. Vaginal exams were minimal with discussion to the woman and partner before there are done.

Four hours later the woman gad a full dilatation of the cervix and was helped to the delivery room and placed in lithotomy position she pushed spontaneously and the midwife encouraged the woman to push when she had a contraction. The partner was also supportive. As the baby was born the midwife gently helped the baby to be delivered and placed the new born baby boy on the woman’s abdomen and administered Oxytocin. The other midwifes examined the new born and performed the Apgar scoring. The midwife safely delivered the placenta and measured the blood loss and estimated blood loss on the linen. She monitored the vital signs and theywere within normal ranges. There was no post-partum hemorrhage or perineal tears.The woman and newborn baby were sent back to her room with her partner. The midwife handed over a viable mother and neonate to the next midwife.

ANALYSIS

This is a model case containing most of the attributes. The mothercame to the institution for delivery which was a good move and she had the support of her partner. The midwife in labour

ward was very welcoming and encouraged her client through the labour process she also managed her client well and was able to monitor her during labour progress. The midwife conducted the delivery safely without complications noted. This was a proper Safe Delivery.

BORDERLINE CASE

Borderline cases are "those examples or instances that contain mostof the defining attributes of the concept being examined but not allof them".

A 15 year old woman reported in Labour complaining of severe backache pain for the past two days. She was accompanied by her friend. She was unbooked and stayed with a friend.

She was admitted by Midwife X who examined her and found her to be 3cm on cervical dilatation. During history taking she revealed that she was chased away from home by her parents because of the pregnancy and did not know who the father of the pregnancy was.

The midwifes kept her informed about the labour progress. The woman anxiety level surged as she remembered that she was alone in labour while others had partners and did not have enough clothes for the baby. Despite the midwife support, she remained in a highly anxious state throughout her labour. Ten hours later she delivered a baby girl and refused to hold the child. The midwife measured her blood loss and checkedthe vital signs which were within the normal ranges. During physical examination there was no perineal tears noted.

ANALYSIS

This is a borderline case containing few of the attributes. The mother came to the institution for delivery which was a good move. This was not a Safe Delivery as the mother was anxious throughout her labour process and refused to hold her child. She also did not have enough support from family which is one of the important attributes of Safe Delivery.

CONTRARY CASE

According to Walker and Avant (2011), a contrary case is an examplethat does not represent the concept and contains any of the defining attributes.

A prim gravidaged 28 years came to labour ward complaining of low abdominal pain for the two hour. She was booked with the local hospital and had one ANC Visit. She was married and was accompanied by her husband. She was attended to by midwife Y who took her to the admission

room and her cervical dilation is checked by the midwife who confirmed that the cervical os was closed and not dilated. Fetal monitoring was done and all vital signs were within normal ranges. The woman was discharged with a diagnosis of Braxton Hicks contraction. She was not in labour.

ANALYSIS

This is a contrary case not containing any of the attributes. The mother came to the institution but was not in labour. There was no relationship to the concept of interest.

EMPIRICAL REFERENCES

Empirical references represent observable characteristics that indicate the occurrence of the phenomenon studied, which is safe childbirth. Empirical referents are indicators or classes of the phenomena used to demonstrate the occurrenceof the concept or measure the concept (Walker and Avant, 2011).These include a viable mother and neonate, skilled and competent midwife to admit, deliver and care for the mother and newborn.

CONSEQUENCES

These are events that occur as a result of safe delivery (Walker and Avant, 2011). They include reduction of maternal complications, reduction of maternal mortality, reduction of prenatal mortality and viable pair of mother and child and quality of life is rendered.

RECOMMENDATIONS

Although the integrative review has been done following the methodological steps proposed for the literature search of articles on Safe Delivery, the lack of studies demonstrating the clinical practice of safe childbirth was evident. There is need to have randomized clinical trials or studies are necessary to identify potential risks that bring harm to the patient and. There is need to encourage changes in practice which lead to safe care in childbirth.

CONCLUSION

The definition of safe delivery varies according to the understanding of people. Midwifes might understand what a safe delivery means and their definition concurs with the WHO definition of delivery performed by a skilled person in a safe environment. This concept paper defined what safe delivery is. This paper aimed to have a standard definition of what safe delivery means.

Most studies are still not focused on safe delivery but talked about normal birth, which has equal relevance, but does not always guarantee the necessary safety. Professionals need to have the

expertise to know how to identify risks during childbirth and prevent unnecessary damage caused by inadequate care during delivery which can led to complications post childbirth.

Lack of studies demonstrating the clinical practice of safe childbirth is evident andrepresents one limitation in maternal child heath in the world. Studies should be encouraged in the midwifery practice so as to promote safe care during childbirth.

Although there is a movement towards safety in childbirth care, there is still a long way to go. This is because there is no clear definition of safe delivery.WHO already has tools such as the checklist for safe childbirth. However, it is observed that the understandingof the physiology of delivery related tocare in the check-listis something that may favorsafe childbirth.

Without an objective definition of safe childbirth, it is not clear what we are trying to achieveor avoid during the labour period. For those health professional still committed to preserving safe delivery, aclear definition is far more valuable and needed than a poorly defined statement of normal birth.

The concept analysis showed there was no concrete definitionfor this concept in the studied literature and did not include all aspects to define what makes a safe delivery.

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