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Obstetric fistula stress: concept paper

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Abstract

Introduction: Preventing and managing obstetric fistula contributes to the achievement of the Sustainable Development Goal three (3) of improving maternal health. Obstetric fistula is one of the most serious and tragic childbirth injuries. It leaves women leaking urine, faeces or both, and often leads to chronic medical problems with underlying stress, depression, social isolation and deepening poverty. Most women will not seek treatment but rather isolate themselves leading to complications. Also, and quite disturbing, most women do not know that the anomaly can be corrected. According to WHO (2005), an estimate of 50,000 to 100,000 women are found to be developing obstetric fistulae each year. In developing countries, in particular, more than two million women living with obstetrical fistulae are under the age of 30. In poor countries, the youngest patients are 12-13 years, between 50 to 80% of women are younger than 20 years in developing countries. Therefore, it is of utmost importance to equip women so as to prevent early marriage, adolescent pregnancies, endorse the importance of educating a girl child and the importance of hospital delivery and antenatal care services.

Methodology: Walker & Avant's (2011), eight (8) step classic procedure for concept analysis was adopted in analyzing the concept of obstetric fistula stress. Literature search was done in 3 weeks and out of the 30 reviewed only 12 articles were selected for analysis. Google scholar search engine was used to assess journals and papers.

Results: Literature focused on defining the attributes of obstetric fistula, which are early marriages, teenage pregnancies, late antenatal booking and home deliveries. Obstetric fistula was defined as a hole that develops between the birth canal and bladder and/or rectum, it is caused by prolonged, obstructed labour without access to timely, high-quality medical treatment. It leaves women leaking urine, faeces or both, and often leads to chronic medical problems with underlying stress, depression, social isolation and deepening poverty.

Conclusion: Obstetric fistulae affect the woman as she becomes emotionally, physically and psychologically stressed. She becomes a social outcast, worsened by at times a fruitless, prolonged and exhaustive, painful labour. Most men end up divorcing these women as the sexual activity is affected, further deepening the impact of the injury and its associated loss and accompanying stress. The development of an obstetric fistula is directly linked to obstructed labour, one of the major causes of maternal and neonatal morbidity and mortality. Medium to low income countries can manage obstetric fistulae by advocating for a delayed age of first pregnancy, encouraging the cessation of harmful traditional practices and promoting timely access to maternity and obstetric care, and when present disseminating information of its repair by simple surgery. It is therefore of vital importance that women be prepared to avoid early marriage, teenage pregnancy, appreciate the importance of educating a child, and have access to hospital care provisions and prenatal care services.

Keywords: Fistula, obstetric, labour, stress, urine and incontinence

Introduction

Obstetric fistula is a preventable and in most cases, treatable childbirth injury that leaves women incontinent, ashamed and often isolated from their communities. It occurs when a woman or girl suffers prolonged, obstructed labour without timely access to an emergency Caesarean Section. A debilitating condition that has left and continues to leave, hundreds of thousands of women suffering in solitude and shame. Obstetric fistula is undeniably one of the most telling examples of inequitable access to maternal health care and, until recently, one of the most hidden and neglected conditions, in the developing world, (Abouzahr, C. 2003) [1].

Millions of girls and young women live alone in isolation, frequently abandoned and excluded in poor resource countries by their own families (Changole, J, 2019) [8]. They live usually in extreme misery, shunned or accused by society. Lack of income or gainful employment coupled by loss of babies at times, leave these young women distraught, with stress, more grief, pain and depression. Their inability to control physical functions, leaves them embarrassed by always being soiled, wet and smelling. Repeated infection, infertility, damage to the vaginal tissue makes sexual intercourse difficult resulting in marital discord and all these factors make them vulnerable to a continued stressful status quo. The most tragic thing is that the associated contributory factors can be prevented by avoiding child marriages, unsafe conventional deliveries and instituting timely maternity treatment and obstetric care. WHO (2005), estimates that between 50,000 and 100,000 women develop obstacle fistulae every year.

Problem statement

From the researcher's observation as a midwife, most of the women who suffer a difficult delivery are not receiving emotional, spiritual, psychological (to include mental health), social and economic support. There is no management package for women who would have undergone a difficult delivery, resulting in lack of consistency and unstandardized care of such women. Most women in rural and farm clinics do not know that the fistula can be repaired, they will just live in isolation. After visiting the clinic twice or thrice one would then just stay at home to avoid embarrassment after soiling in the presence of others.

Objective

The objective of the concept analysis was to provide an in-depth description of what Obstetric Fistula Stress means by defining it and recognizing the antecedents and attributes of the concept.

Significance of the concept

Midwives play a critical role in maternal and child health in giving reproductive health knowledge and encouraging community participation in maternal health. It broadens understanding of maternal health to include supply and demand issues of maternal health services. This concept will help to develop a tool and standardize care everywhere among nurse midwives and encourages the participation of women in demanding quality obstetric care services. When read by concerned health personnel, this concept analysis should stimulate the compassionate drive to help reduce obstetric fistulas and to facilitate a holistic approach to care.

Literature review

Literature search was done from 28 October to 18 November 2019 and out of 30 reviews only 12 articles were selected for analysis. Google scholar search engine was used to assess journals and papers.

Method

Walker and Avant's strategic eight step method of concept analysis was used in analyzing the Concept of Obstetric fistula stress. The steps include selection of a concept; determining the purpose of analysis; identifying all uses of the concept; determining the defining attributes of the 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).

Method

The eight (8)-step strategic method of concept analysis by Walker and Avant was used for the study of Obstetric fistula stress definition. The steps include the choice of a concept; determining the purpose of analyzing; identifying all use of the idea; defining the concept's defining attributes; determining the concept's antecedents; identifying the concept's impacts; developing a model case; and identifying the concept's empirical referents (Walker and Avant 2011) [17].

Definitions of the concept

Obstetric fistula is an abnormal opening between the vagina of a woman with her bladder and her rectum that constantly leaks her urine and/or feaces and stress is a feeling of emotional strain and pressure, a type of psychological pain. Pressure from a baby's head during prolonged or obstructed labour restricts blood flow and damages tissues between the vagina and the bladder or rectum. Although obstetric fistula is caused by prolonged and obstructed labour, it is rooted in poverty, predominantly affecting marginalized women who lack access to quality obstetric care, who typically are of lower socio-economic status, with lower levels of education, in rural areas, without prenatal care, and married at younger ages (Zheng and Anderson, 2009) [25]. Childbirth care is affected by a variety of factors including access, socio-economic resources, and culture. Obstetric care may be geographically or financially unavailable, home delivery may be common and preferred over facilities, while timely referral systems for emergency obstetric care may be lacking, and girls and women may lack decision-making power and agency for seeking care (Blum 2012, and Jones 2007, Yeakey *et al*., 2009) [4, 10, 24]. Many barriers preventing care for pregnant women and during labour are mirrored in women with fistula unable to access care. A poor, rural, pregnant woman may be unable to afford transportation for birth in a medical facility, and may be similarly unable to access transportation to a facility if she develops a fistula during delivery. Women may be isolated from their family and community, divorced, or unable to work or participate in community events because of their condition. Community members may blame women living with fistula for their condition, viewing it as punishment for sin or a venereal disease or a curse. Consequently, fistula is associated with stress, psychosocial problems such as depression and anxiety, which may further contribute to inability to seek treatment. Fistula is also associated with sexual, fertility, and future childbearing concerns (Yeakey *et al*., 2009; Wall *et al*., 2005; and Arrow Smith *et al*., 1996) [24, 18, 2]. Surgical treatment of fistula is generally reported to be successful, although there is limited long-term evaluation on urinary continence or subsequent quality of life (Creanga *et al*., 2007) [9]. In low-income countries, women have less access to appropriate surgical care for repair due to the low availability of health facilities with repair services and lack of surgical training for fistula repair. In addition to these supply side barriers to repair, a variety of demand side factors affect women's care seeking for fistula repair, for instance, women may not be aware that treatment is available, or they may lack decision making power and the correct attitude for seeking care. Furthermore, due to the large backlog of women requiring repair and limited available surgeons and health personnel, women may experience long waits (Velez *et al*., 2007; Wall *et al*., 2005; Ramsey *et al*., 2007; and Browning and Patel 2004) [15, 18, 12, 6].

Antecedents

According to Walker and Avant (2005) [16] the antecedents are episodes that must occur prior to the occurrence of the concept. The main antecedents of obstetric fistula from reviewed literature, are as follows:

Prolonged, obstructed and unaided labour

Prolonged, obstructed and unaided labour is the main cause

of obstetric fistula. The baby's head pushes the inside of the vagina so hard, blocking blood flow, which weakens the tissues of the vaginal wall. If delivery is unaided there could be tears affecting the bladder and the rectum and that delays labour and delivery.

Poor socio economic status
The main interlinked root causes of obstetric fistula are poverty, malnutrition, deficient services of the health, early child-bearing and gender discrimination.

Poverty
Poverty is the main social risk factor because it is associated with early marriage and malnutrition, and it reduces a woman's chances of getting timely obstetric care.

Parity
Birth weight of infants tends to increase with subsequent pregnancies, becoming a risk factor for cephalo-pelvic disproportion and predisposing women to obstructed labour.

Defining Attributes
The defining characteristics are features of a concept which are repeatedly present in literature when the definition occurs (Creanga *et al*., 2007) [9]. The defining characteristics of the burden of obstetric fistula were determined by the factors that lead to a woman developing a fistula.

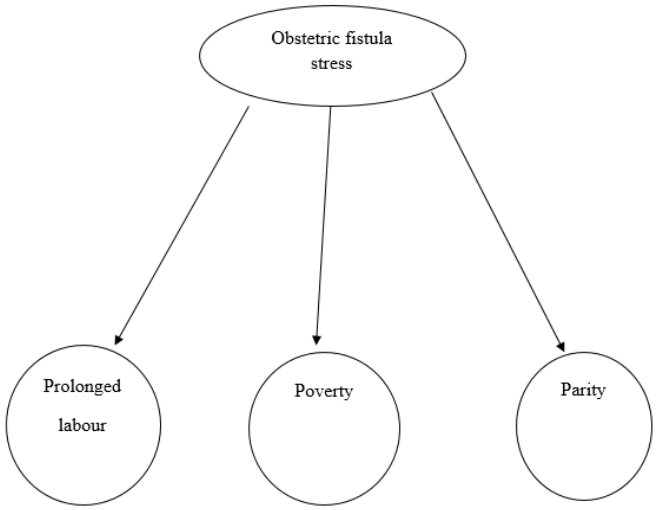

Fig 1: Diagrammatic Representation of Defining Attributes of the Concept

Consequences
Walker and Avant (2011) [17], defined consequences as events that can occur as a result of the occurrence of a concept and that can often stimulate new ideas for research pertaining to certain concepts. Possible consequences of patients with obstetric fistula stress include increasing hospital length of stay, decreasing quality of life, increasing morbidity and mortality and organ dysfunction (Massey, Chaboyer, & Anderson, 2017) [11]. Common features include the following:- Smell and Wounds Majority of women experience bad smell and develop wounds associated with obstetric fistula. The most disturbing physical consequence mentioned was the bad smell, resulting from tremendous leakage of the urine and/or faeces and also constant wetness in their genital area.

Urine and fecal incontinence
The continuous leakage of urine and/or faeces is stressful and necessitates the unceasing use of pads. Affected women would prefer to stay alone as they shunned being given nicknames.

The lived experiences according to (Changole, J. *et al*., 2015) [7]
My husband left me when I got this problem. I lived without a partner for 18 years. My husband said that he cannot cope with the smell and decided to leave me alone. I used to stay at home like a paralyzed person because I cannot go to the community meetings. They abused me. When our neighbours see me, they say "the urinator" is coming, and they ask their friends "can you smell urine, what is smelling, where it is coming from". I feel ashamed and talk to myself "self-mumbling" and say: yes they are talking about you. They are gossiping about you. Sometimes, some of them turn their lips up. Yes I hear. I never feel good. I don't have interest in people to seeing me (Dhubado, 39 years old, lived with obstetric fistula for 18 years).

Another participant stated: I frequently wear pads. I do change it every one hour. Yes when it's becoming wet and dirty that I can't sustain it, I have to change and wear a new one. It would be somehow fine for me to change but the most challenging is the embarrassing smell that is coming. I use sprayer perfume to suppress the bad odour (Safiyo, 17 years old, lived with obstetric fistula for 2 years).

Only one interviewee: Mentioned serious sores and rash that developed around her upper thigh and the area surrounding genitalia. This disease created sores and wounds between my thighs because I used to wear strong and heavy clothes "mostly long Hijab" to cover my whole body. I don't open my under-part and it's hot always. Yes I can't wear soft clothes. Yes I continuously wear absorbent material "pads" and hijab outfits as to minimize the tremendous wetness and odour (Safi, 40 years old, lived with obstetric fistula for 8 years).

Psychosocial challenges
Literature revealed that women experienced physical, social and psychological challenges due to the immediate or long-term consequences of obstetric fistula which included stigma and isolation, reduced social support, and disrupted marital relationships.

The patient with obstetric fistula stress-discussion
The Exact prevalence rates in the region (and, indeed, the world) are not known, but Dr. Tom Raassen and Dr. Festus Ilako in a UNFPA Obstetric Fistulae Needs Assessment Report of findings from Nine African Countries (2003) extrapolated a figure of 6,000 to 15,000 new fistulas occurring each year in East Africa. This figure was deduced from the knowledge that every year, three million women survived deliveries in the region; and for each thousands of these surviving mothers, there were an estimated two to five cases of fistulas. If approximately 1,000 repairs are performed each year in the region, at least 80 per cent of

women with fistula are not getting services. The important thing to note is that in the First world, obstetric fistula belongs to the past, therefore it can be prevented if maternal health care services are made accessible to all. Surgical repair is possible and literature says approximately 80-95% of vaginal fistula can be closed surgically. Disparities in the physiological, psycho-socio-spiritual domains, for instance, social segregation, constant incontinence, shame, and the accompanying stress, worsening of physical, emotional, psychological, spiritual and social wellbeing of the patient, could result in either adaptation and recovery or maladaptation and death of the patient, depending on the tenacity of the individual. If there is no physical and psychosocial support from the spouse or relatives it results in the woman being depressed and becoming desperate but if there is full support the individual handles stress better and recuperates quickly. All they need is love and empathy from the caregivers and relatives especially the husband. The physical trauma to the birth-canal as a result of obstetric fistula affects, reproduction and sexuality and inconsequent, destroying womanhood, which is highly valued culturally, thus creating an inevitable loss of a positive self-concept, perpetuating stress and a sense of low self-esteem in an individual. According to Bashah D.T, *et al*., (2018) [3], emotional deterioration refers to a patient's inability to interact effectively with caregivers, relatives and is detached from the surrounding milieu. The individual is also not concerned about self, whereas physical deterioration refers to declining and weakening of the physiological integrity of a human being; whilst spiritual deterioration refers to the decline in spiritual countenance. On the other hand social deterioration refers to the decline in social support from the significant others such as family, friends and care givers. This is worsened if there is no emotional and psychological support from next of kin and family members. When one's body loses normal function such as incontinence of faeces and urine the individual under goes a grieving process and family support helps in order to prevent emotional deterioration upon the affected woman. Intensive counseling is very vital to these women so as to avoid mental breakdown which is detrimental to their health. The same authorities also stated that psychological deterioration refers to mental degradation secondary to trauma and stressors. Therefore, the health workers must consistently be cognizant of addressing the physical, emotional, social, spiritual aspects when rendering care to the patients with obstetric fistula stress.

Model case

In general, in low resource settings, fistulas are caused by obstructed labour. The majority of women in the countries where a needs assessment took place, appeared to have them at a young age, most often in conjunction with their first vaginal delivery (Wilson, S.M *et al*., 2015) [20]. An ideal model, is one that possesses the characteristics which distinguishes it amongst other cases under study. The real model includes all the characteristics or features of the concept of interest.

Muva is 15 years old. She was living with her parents in remote areas of Rushinga and is the first girl of a family of 5 boys and 4 girls, being fourth born. She never attended school. Her father, a farmer and a spirit medium, did not send her to school, only the boys attended school. She stayed home to help with house chores and farming in the fields. Her father married her to one of his fellow neighbours at the age of fourteen years. Muva agreed to this marriage and became pregnant a few months later. She continued to work at home throughout the pregnancy. The nearest health centre was of a walking distance from her husband's home, but never attended antenatal clinic visits. Her mother informed traditional birth attendant when labour began. Muva was in labor for three days. They tried to make her push but the head of the baby did not descend. They took Muva by scotch cart to the health centre. She was examined by a midwife at the health centre who blamed her for coming late and for not booking the pregnancy. After a few hours she delivered a macerated stillbirth and sustained a third degree tear, which the midwife could not repair. She had to be moved for surgery to a nearby hospital. Muva realized that she could not contain her urine after the treatment. She was saddened that she had lost her baby, and ashamed that she was always wet, and that she gave the scent of urine constantly and wondered when all this could come to pass. The husband, instead of being sympathetic and caring, divorced her and married another woman. Her father, relatives and other villagers, instead of being supportive and understanding, failed to accommodate her and chased Muva and her mother, claiming that Muva's mother brought bad luck and divorced her. Muva and her mother found accommodation at an adjacent farm where she is getting help at a close clinic, hoping to be healed in the future.

Model analysis

The above case has all the attributes of the concept of Obstetric Fistula Stress, prolonged labour, poverty, coupled with ignorance and being a young para-0. The woman's dreams of a healthy baby in a happy marriage are shuttered. Her social life is disrupted. The family and the community regard her as cursed and it is almost always that the woman bears the brunt.

Boarder-line case

Borderline cases are examples that contain the majority of defining attributes, but not all of them (Walker and Avant, 2011) [17]. Borderline cases generally have one important feature missing in comparison to the model cases (Wilson, 1963) [19]. These cases are inconsistent when considering the defining characteristics of the concept and help to conclude why the model case is consistent (Walker and Avant, 2011) [17].

A 19 year old Para1 Gravida 2 is admitted in labour, after four focused Antenatal care visits with no complications noted. The spouse accompanied her and she was admitted by skilled midwife who anticipated a big baby and she was well monitored in labour through the use of a partograph. The midwife explained to the woman of the probability of perineal tear. The woman was well informed and labour progressed to a live male infant with a birth weight of 4.500grams with an APGAR score of 8/10 at one minute and 9/10 at ten minutes. On examination the woman sustained a third degree tear which was repaired. The woman was fully instructed on how to manage the tears through use of sitz baths. The husband was able to provide

all the health resources which were needed and the woman showed to be psychologically stable as the family assisted her and she received adequate rest. The woman was assisted to initiate breast feeding within an hour of delivery and bonding was promoted. Health education given on: nutrition, adequate rest and avoiding physical labour, postpartum bleeding normal lochia, personal hygiene and hand washing, when to resume sexual relations when perineal wounds are healed within period of six weeks, preferred family planning methods, follow up care and community linkages with village health workers and review dates. The pain management was done and the Pastor from a church came to pray for her and she was spiritually empowered. The midwife outlined the discharge plan and the woman was linked to the community Nurse who conducted a home visit. Within three days of postnatal care the woman came for review. She complained of a wet pant on and off. On examination she had a slight leak of urine at the urethral orifice. Borderline Case and Analysis It was borderline because she did not have all the attributes of the concept and she did not have a hole between the urethra and the vagina. A very small tear near the urethral orifice that needed to be managed. The woman could have had a minor cephalo-pelvic disproportion that was not well managed. In addition to this potential cause of obstetric fistula, physicians in the region also report fistulas resulting from poorly managed Caesarean sections and deliveries within health facilities (Wilson S.M. *et al*., 2015) [20]. The husband was supportive throughout the case and as such her levels of stress were under control.

Borderline case's analysis

It was limited, as she did not have all of the concepts' attributes and had no hole between the urethra and the vagina. A tear close to the urethra that had to be controlled. The woman may have had a low, ineffective cephalo-pelvic disproportion. In addition, Obstetricians, also report obstetric fistulae caused by the poorly managed caesarean sections in health care services (Bashah *et al*., 2018) [3]. The husband supported his wife in the entire process and thus regulated their stress levels.

Contrary case and analysis

A contrary case is a clear example of what a concept is not, and does not include any of the attributes (Walker and Avant, 2011) [17]. The contrary case of obstetric fistula stress model case is as follows: A 23-year-old woman para 1 was properly booked and labour progressed well to the live-birth of her baby girl. On examination, post-delivery of the placenta, urine continued to leak. There was no communication hole between the vagina and the urethra. She was catheterized and blood stained urine was obtained. She was diagnosed as raptured bladder and was prepared for theatre for repair of raptured bladder.

Empirical referents

Empirical referents are measurable ways to demonstrate the occurrence of the concept, (Walker & Avant, 2011) [17]. The empirical referents present as obstetric fistula stress signs and for obstetric fistula they include:- child marriage, unbooked pregnancies, obstructed labour and home delivery.

Obstetric fistula stress signs

These are characterized by the presence of a communicating hole between the vagina and the urethra or the vagina and the rectum following a prolonged difficult labour associated with young mothers, poverty and note the parity as babies increase in weight with subsequent pregnancies; constant incontinence of urine and feaces; accompanying smell, wetness, shame, social segregation, low self-esteem, divorce and might have sores in the genital area and underlying stress.

Recommendations

Low income countries require a health policy that include primary maternal health care services, where maternal health care is accessed by all, in order to reduce maternal and infant morbidity and mortality. Reproductive health education should be intensified amongst young girls so as to discourage early marriages. Dangers of obstructed labour should reach women not only in antenatal clinics but also to be taught in schools. The health personnel/midwives should respond to the biopsychosocial and spiritual needs of all clients and utilize their skills and intuition to detect early signs for early diagnosis, referral and treatment of obstetric fistula. There is need to involve policy makers so that holistic maternal support following difficult delivery could be included in the emergency package of maternal health management care. Maternal support does not only improve the wellbeing of the mother but it also restores the dignity of womanhood. The findings can be used as a resource for health education and advocacy programs aimed at preventing obstetric fistula, reducing stigma and increasing social support for women and girls living with obstetric fistulas. Further research is recommended however, to explore the experiences of women following treatment and to establish the community needs for the women when they are discharged from hospital after treatment.

Conclusion

Promoting universal maternal support following a difficult delivery ought to be a mandatory package for all affected women in postnatal care. All mothers need maternal support especially following a difficult delivery and that maternal care improves their coping strategies as they conjure up their psychological well-being. Obstetric fistula is a brutal complication of obstructed labour accompanied with poverty, which can be prevented. Surgical interventions do help as patients with uncomplicated fistulae can undergo a simple surgery to repair the hole in their bladder or rectum. Preventing and managing obstetric fistula will contribute to improved maternal health and achievement of the Sustainable Development goal number 3 (2016).

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