

Preconception Care: Concept Paper

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Abstract

Preconception care is lagging behind in most of the developing countries, yet it is a very critical component in maternal and child health. Preconception care is perceived as not very important by most of the people and its difference with services provided at well women clinics is not clear. The objective of this concept analysis was to fully describe preconception care. Walker and Avant model of concept analysis was used in helping to describe the concept of interest. Literature search was conducted in one month using Google Scholar, Pub-med and MEDLINE as search engines. Twenty studies were reviewed and fifteen were found relevant in the description of preconception care. The attributes, antecedents, consequences and empirical referents of preconception care were identified in the fifteen studies thereby defining preconception care as a set of interventions provided before conception for both males and females.

Key words Preconception care, concept

1.0 Introduction and Background

Globally there is an increasing awareness of the burden of maternal, newborn and child mortality and it is reported that over 350 000 women of child-bearing age die each year due to complications of pregnancy and over 15 million suffer long term illness and disability (Bhutta et al ,2011). Regionally mortality rate in women of child bearing age in Africa is about 500 deaths per 100 000 live births unlike 4 per 100 000 in the developed nations (Bale, 2003). Zimbabwe has had its own share of the alarmingly increased rate of maternal and neonatal mortality currently at 460 and 50 per 100 000 live births respectively (ZDHS,2016). Awareness and accessibility of preconception care services may significantly contribute to reduction of maternal and neonatal morbidity and mortality.



Currently well women clinics and youth friendly corners are in place but not serving the function of preconception care services hence the need for people to distinguish between the preconception care concept and the well woman clinics and youth friendly services which should be complimenting each other rather than replacing each other. Women report for antenatal care after they have already conceived without receiving any preconception care services. There is no great emphasis on preconception care and 4 out of 10 women including health professionals do not even appreciate the need for them to be screened prior conception (WHO, 2013). Little is known about this concept hence the need to increase the visibility of its existence.

1.1 Objectives

The study sought to define preconception care concept and identify its antecedents and consequences.

1.2 Significance of the study

The concept of preconception care is rarely discussed in most of the health arenas, yet it is an essential component in maternal and child health. The concept analysis aimed at increasing awareness and understanding of the concept among health care providers and the general public. This will go a long way in influencing policy makers to develop polices that enable the adoption and implementation of preconception care services as a strategy to reduce maternal and infant morbidity and mortality.

1.3 Methods and materials

Walker and Avant 8 step model was used in the analysis of the preconception care concept as it provides an in-depth analysis into a concept.



The model highlights the steps that were taken to analyze this concept starting with identification of a concept, determining aims or purpose of analysis, identifying antecedents and consequences and defining empirical referents as well as determination of a model case, related and contrary case. Literature search was conducted in a month using Google Scholar, Pub-med and MEDLINE as search engines and yielded twenty studies .Further review and refining removed five studies which were repetition and were not specifically defining the concept of interest to remain with fifteen studies.

1.4 Results

Thirteen articles defined preconception care as a set of interventions provided for women before conception (Nekuei 2014; CDC,2014; Lassi et al,2014; PRAMS,2011; WHO,2013,ZDHS,2016; Women's health,2017; Chhabra,2016; Bhutta et al,2011; Singh et al,2010; Kerber et al,2007; Dicenso,2009; Mason et al, 2014). Two articles did not define preconception care but looked at care of women pre pregnancy. (Oringanje, 2010; Barclay, 2007). One article spelt out the attributes as childbearing age, reproductive health information and preconception care interventions. (WHO, 2013). Two articles described the antecedents as increased maternal and neonatal mortality, increased vertical transmission and increased adverse birth outcomes. (Mason,2014; WHO, 2013) two articles outlined the consequences of not having preconception care as increase in maternal and neonatal morbidity and mortality, birth complications and unsafe abortions due to unhealthy behaviors. (Mason, 2014; WHO, 2013) The empirical referents were identified as utilization of preconception services, availability of facilities, providers of preconception and improved reproductive health behavior. (WHO, 2013; Lassi et al,2014; Chhabra, 2016)



1.5 Discussion

The aim of this concept paper was to give an in depth description regarding preconception care concept by determining its defining attributes, antecedents, consequences, for the purposes of increasing awareness of the concept to the health care providers and clients. In the context of this study preconception care is provided before pregnancy but many women report for Antenatal care services post conception.

1.5.1 Attributes

According to Walker and Avant (2005), attributes are those traits / characteristics of a concept that are closely linked with the concept and will assist in differentiating a particular concept from any other concept. The following attributes were gathered from literature: child bearing age, reproductive health information and interventions prior conception and preconception clinics. Preconception care is offered to males and females of child bearing age as well as adolescent boys and girls unlike well women care which is given to women only at any age.

1.5.2 Antecedents

Antecedents are events and circumstances which occur prior to the occurrence of the concept and often associated with the occurrence of the same concept (Walker and Avant, 2005). The identified antecedents in this study included increased maternal and neonatal mortality due to delay in the identification of maternal risk factors (Mason et al 2014), lack of reproductive health information to make informed decisions (WHO, 2013), high risk for vertical transmission of HIV because of lack of information about HIV and its consequences to the baby (WHO, 2013), increased stillbirths, unsafe abortions, preterm births, low birth weight among other problems (Mason et al 2014).



1.5.3 Consequences

Walker and Avant (2011) describe consequences as defining outcomes as a result of the concept.

The study revealed that lack of preconception care leads to unintended pregnancies in adolescents and women of childbearing age which in turn increase maternal and neonatal morbidity and mortality (WHO, 2013). Major perinatal adverse outcomes include anemia, intrauterine growth retardation, obstructed labour and post-partum hemorrhage. Mason et al (2014) also noted that lack of reproductive information prior conception leads to unhealthy behaviors and poor reproductive outcomes. These behaviours may include smoking, alcohol consumption and unsafe sexual practices. Without preconception care the risk of vertical transmission of HIV is high.

1.5.4 Definitions

Preconception care is defined as a set of interventions provided to women of child bearing age that aim to identify and modify biomedical and social risks to women's health for better pregnancy outcomes through prevention and management (Women Health, 2017, WHO 2013 & Lassi et al 2014). This is the kind of care that if given to adolescents and women of child bearing age brings transformation of nursing practice and yield positive maternal and neonatal outcomes.

Chhabra (2016) defined preconception as any intervention provided to women / couples of child bearing age, regardless of pregnancy status or desire, before pregnancy, to improve pregnancy outcome, health of women, newborns and children.



1.5.5 Model case definition

Walker and Avant (2011) described a model case as, "a pure case of the concept, a paradigmatic example, or a pure exemplar".

Sister Moyo welcomed a couple who reported at her clinic to seek information on whether it was safe for the woman to conceive as they were both not sure of their health states. The husband was keen to know their HIV status and the wife was worried about her advancing age of 34 years. They had delayed having children because they still wanted to pursue their own careers. The nurse provided information to address their concerns and screened them for HIV after counseling.

1.5.6 Analysis

This is a typical case of a couple seeking preconception cares. They were both keen to have all the information regarding their own health before they think of pregnancy. The nurse provided the preconception care package relevant to client needs.

1.5.7 Borderline Case

A borderline case has many of the same elements as a model case however one or more of the defining attributes differs in some way. It is closely connected to the case but has some dissimilarity that makes it inherently distinguishable from the concept being studied (Walker and Avant, 2011).

A 50 year old woman is married and has not had children. She is married but her husband is a long distance truck driver. She visited the clinic for help to conceive as she is being threatened by in-laws. She feels she is not well and no longer having her periods regularly.



1.5.9 Analysis

This woman is already having a problem of infertility. She needs medical care not preconception care though she would want to conceive. At 50 both wife and husband has missed the critical moments for conception which could have helped if preconception care was given earlier in their marriage.

1.5.8 Contrary case

An **18 year** old lady visited the clinic as she wanted help regarding addiction to street drugs and she mentioned sniffing glue as one of the drugs she is addicted to. She is very keen to stop since she now wants to lead a normal life. She has found a man who is willing to marry her and she felt continuing with the way she was living will impact negatively in her life.

1.5.9 Analysis

This woman is a woman who can bear children at any time. She needed psychotherapy which will help her stop sniffing glue.

1.5.10 Related case

Mrs Mauto reported at a clinic and gave a history of having had three consecutive miscarriages and she wanted to have health assessment to diagnose the causes of the miscarriages. She wanted to get pregnant again.

1.5.11 Analysis

This is a woman who had fallen pregnant and still wanted to get pregnant but was worried because she had had previous abortions and was afraid they will continue. She would have



investigations like HIV testing, education on lifestyle and ultra sound scan done to note any uterine deformities and other causes.

1.6 Operational definition

This paper focused on reproductive health care prior to conception and not after conception.

After reviewing the above definitions, preconception care can be defined as the biomedical and social interventions given to both males and females before conception to promote positive health behavior change for good birth outcomes.

1.7 Empirical Referents

Walker and Avant (2011) described empirical referents as classes or categories of actual concept that by their existence demonstrates the occurrence of the concept. The empirical referents were identified as utilization of preconception services, availability of facilities, providers of preconception and improved reproductive health behavior. (WHO, 2013; Lassi et al, 2014; Chhabra, 2016)

1.8 Conclusion

Findings from the study noted that preconception care services are not the same services offered at Well woman clinics and youth friendly clinics. These help in promoting good reproductive health but do not replace preconception care hence they are supposed to complement preconception care. Lack of preconception care is missing the critical link to positive health behaviors which significantly contribute to increasing maternal and neonatal morbidity and mortality rates. There is therefore need to increase awareness and access to preconception care in all provinces and clinics in the country so as to avert the above problems.



References

- Barclay L & Vega C (2007) CDC Issues Guidelines for Preconception Care of Women CME/CE Released: 3/12/2007; Reviewed and Renewed: 3/12/2008
- 2. Bhutta, ZA, Dean, SV. Imam, AM, Lassi, Z.B (2011). A systematic review of Preconception risks & Interventions. The Aga University.
- 3. Chhabra S (2016) *Preconception diagnosis, awareness, advocacy for safe pregnancy, safe birth* J Pregnancy child health 3:279. Doi; 10:4172/2376.127X.1000279
- 4. Dicenso., A., Guyatt G.H., Willan A.R., & Griffith L. (2009). Interventions to reduce unintended pregnancy among adolescents; systematic review of randomised controlled trials. British Medical Pub Med journal.
- Eriksen C W (1995) The flankers task and response competition: A useful tool for investigating a variety of cognitive problems. University of Illinois, Urbana-Champaign, Illinois USA.
- 6. Gavin, LE,. Catalano R.F., Davidferdon C & · Gloppen · Christi K.M...

 (2010). A review of positive youth development programmes that promote adolescent sexual and reproductive health. Journal of Adolescent Health.
- 7. Guttmacher Institute,(2010)). Introducing a new world: young women's sexual and reproductive lives. New York. WHO (2011).
- 8. Kerber K., Graftjohnson J.D., Bhutta Z.A., Okong P&· Starrs A

 (2007). Continuum of care for maternal new-born and child health; from slogan to service delivery lancet. PubMed journal.



- 9. Lassi Z.S., Dean S.V., Mallick D., and Bhutta Z.A.(2014)*Preconception care*: delivery strategies and packages for care. doi: 10.1186/1742-4755-11-S3-S7
- 10. Mason E, Chandra-Mouli V, Baltag V, Christiansen C, Lassi Z.S, and Bhutta Z.A. (2014)

 *Reproductive Health 11(Supplement 3):S8 https://doi.org/10.1186/1742-4755-11-S3-S8
- 11. Nekuei, N., Kazemi, A., & Hasanzadeh, A. (2014). Preconception interventions in infertile couples. *Journal of Education and Health Promotion*, *3*, 101. http://doi.org/10.4103/2277-9531.139683
- 12. Oringanje C, Meremikwu MM, Eko H, Esu E, Meremikwu A, Ehiri JE.(2010)

 Interventions for preventing unintended pregnancies among adolescents University of Arizona · University of Calabar
- 13. Polit D.F. and Beck C.T. (2004) Nursing Research: principles and methods 7th ed. London: Lippincott Williams & Wilkins
- 14. Rodgers B.L., Knafl K.A (Eds.), *Concept development in nursing*: Foundation, techniques, and applications (2nd ed), Saunders, Philadelphia, PA (2000), pp. 77-102
- 15. Singh S., Sedgh G., & Hussain R (2010) Unintended Pregnancy: Worldwide Levels, Trends and outcomes Studies in Family Planning.2010; 41(4):241-50. Susheela Singh, Gilda Sedgh, and Rubina Hussain
- 16. The National Advisory Mental Health Council Workgroup on Child and Adolescent Mental Health Intervention Development and Deployment. "Blueprint for Change: Research on Child and Adolescent Mental Health." Washington, D.C.: 20001
- 17. Tsui A.O., McDonald-Mosley R., & Burke A.E. (2010). Family Planning and the burden of unwanted pregnancy. Epidemiology review. Pub Med Journal.





- 18. Walker L.O. and Avant K.C. (2011) *Strategies for Theory Construction in Nursing*. 5th Edition, Prentice Hall, New York.
- 19. WHO (2012). Born too soon. The global act on report on preterm birth. Geneva. Switzerland.
- 20. WHO (2013). Meeting to develop a global consensus on Preconception care to reduce maternal and childhood mortality. Geneva. Switzerland. Women's Health, (2017). Department of Women's Health and Human Services. United States.
- 21. WHO Guidelines on Preventing Early pregnancies and poor Reproductive outcomes among adolescents in developing countries.
- 22. Zimbabwe Demographic and Health Survey (2015) Key Indicators Zimbabwe National Statistics Agency Harare, Zimbabwe The DHS Program ICF International Rockville, Maryland, USA May 2016