



Research Article

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Miscarriage In Accra: A Growing Threat to Motherhood



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Abstract

Introduction: Miscarriage, defined as the premature loss of a fetus up to 23 weeks of pregnancy, is one of the most common conditions affecting women after induced abortion, despite the prevailing misconception that miscarriages are rare occurrences. This study aimed to explore the effects of miscarriages on potential mothers in Accra.

Methodology: A cross-sectional study involving 223 women aged 15-49 who had experienced miscarriage was conducted using stratified random sampling. Data was collected through a well-structured, closed-ended questionnaire.

Results: 81.2% of women suffered emotional trauma after miscarriage, including guilt, shame, depression, and doubts about being mothers. A significant correlation existed between maternal age and number of miscarriages. 60% of miscarriages occurred in women aged 20-30 years.

Conclusion: Miscarriages pose a significant emotional threat to motherhood in Accra. Increasing awareness, support systems, and age-related counselling could help mitigate the negative psychological impact on women experiencing miscarriages.

Keywords: Miscarriage; Motherhood; Emotional trauma; Maternal age

Introduction

Miscarriage, the premature loss of a fetus up to 23 weeks of pregnancy, is one of the most common adverse outcomes affecting women, with an estimated global incidence of 15% of all pregnancies [1-3]. However, this statistic may not accurately capture the true burden, as miscarriages often go unreported, particularly in developing countries where access to healthcare and awareness are limited [4,5]. Despite its prevalence, miscarriage remains an inadequately discussed topic due to the societal stigma surrounding it [6,7].

In Accra, the capital city of Ghana, the impact of miscarriages on the emotional well-being and perception of motherhood among women is an emerging concern. Miscarriages can have profound psychological consequences, leaving women grappling with emotions such as grief, guilt, and a sense of inadequacy as mothers [8,9]. This emotional trauma can be particularly severe in cultures where a woman's self-worth is intrinsically tied to her

ability to bear children [10,11]. The study aimed to comprehensively explore the effects of miscarriages on potential mothers in Accra, shedding light on the psychological and emotional challenges they face and the factors contributing to this phenomenon. By understanding the depth of this issue, appropriate support systems and interventions can be developed to address the needs of women experiencing miscarriages and alleviate the threat it poses to their journey towards motherhood [12].

Furthermore, the study sought to investigate the link between maternal age and the risk of miscarriage, as advanced maternal age is widely recognized as a significant risk factor [13]. Women aged 35 and older have a higher risk of miscarriage, with the risk increasing significantly after age 40 [2,13]. This information is crucial for educating women on the potential risks associated with delaying childbearing, empowering them to make informed decisions about family planning [14].

Methodology

Study design

The study followed a descriptive cross-sectional research design, utilizing questionnaires to gather and analyze data from women in Accra. This approach allowed for an overall generalization and conclusion to be drawn from the collected responses.

Study site and population

The study was conducted in the Greater Accra region, which occupies a total land area of 3,245 square kilometers of Ghana's total landmass. Greater Accra is a diverse region, with Christians constituting the dominant religious group (83.0%), followed by Muslims (10.2%), those without religious affiliations (4.6%), and practitioners of traditional religions (1.4%). Regarding marital status, 50% of individuals aged 15 and above are engaged in formal or informal cohabiting unions, with 9.6% having been married at some point, regardless of the legal marriage age of 18 years.

Sample size and sampling technique

The study sample comprised 223 participants. To ensure representative coverage, the participants were stratified across eight municipal districts within Accra. A stratified random sampling technique was employed, involving the random selection of at least 24 women from each of the eight districts. The participants were recruited from the outpatient departments (OPDs) of hospitals in their respective localities.

Data collection

Data collection was facilitated through the administration of a well-structured, closed-ended questionnaire to the participants

from January to June 2021. The questionnaire was designed to gather relevant information pertaining to the study's objectives.

Data handling and statistical analysis

The collected data were analyzed using Microsoft Excel and the Statistical Package for Social Sciences (SPSS) version 20. Appropriate statistical techniques were employed to derive meaningful insights from the data.

Results

The study sample comprised 223 women within the child-bearing age range of 15-49 years, all of whom had experienced miscarriage. A significant proportion, 81.2% (n=181), reported experiencing emotional trauma secondary to their miscarriage, encompassing feelings of guilt, shame, depression, and doubts regarding their ability to become mothers. In contrast, only 18.8% (n=42) did not suffer emotional distress. The difference between those who suffered emotional trauma and those who didn't was found to be statistically significant (P<0.001).

The mean age of participants varied across the metropolitan areas, ranging from 26.8 years in Ashaiman to 33.7 years in Accra (Table 1). Furthermore, a substantial majority of 89.2% (n=199) received either medical or herbal treatment following their miscarriage, while 10.8% (n=24) did not receive any form of treatment (p<0.001), a statistically significant difference. The specific treatments received by the 199 women are depicted in Figure 1, with misoprostol (48.88%) and dilatation and curettage (D&C) (21.08%) being the most prevalent interventions. It is noteworthy that women who received multiple treatments had experienced recurrent miscarriages.

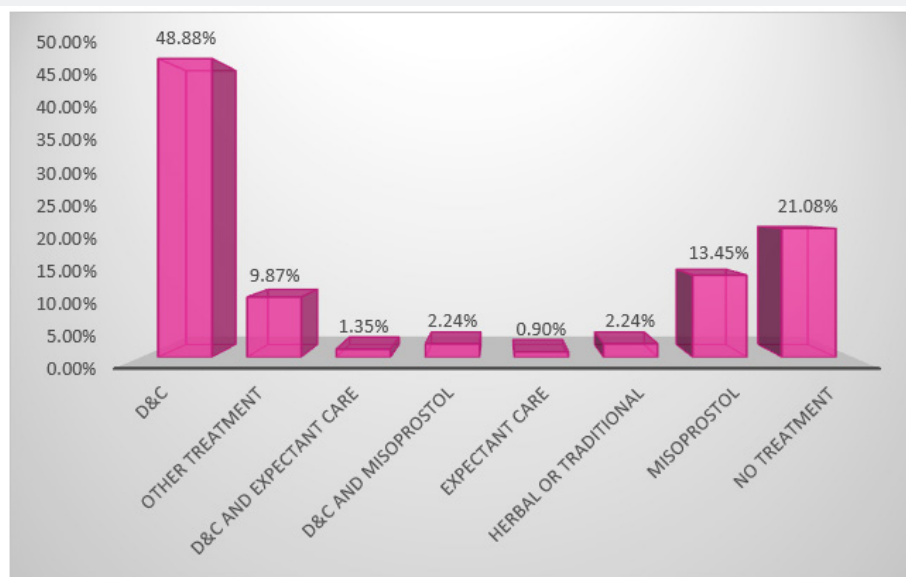


Figure 1: Specific types of treatment received.

Table 1: Distribution of women in the various districts.

S/N	Location	Number of Miscarriage Cases	Mean Age
1	Ashaiman municipal district	24	26.8
2	Tema municipal	40	32.9
3	Madina municipal (Ga East)	39	30.6
4	Accra metropolis	24	33.7
5	Ga west district	24	27.8
6	Ledzokuku-krowor municipal	24	31.5
7	Adenta municipal	24	32.5
8	Ga-south district	24	31.3

Significant correlations were observed between several parameters, including the participant's age and the number of miscarriages experienced ($p < 0.001$), the type of treatment received and the trimester in which the miscarriage occurred ($p = 0.018$), the number of miscarriages, thoughts of miscarriage, and the woman's comfortability in sharing her experience ($p = 0.024$), the trimester of miscarriage and emotional trauma ($p = 0.012$), and the woman's present age and her comfortability in sharing her experience ($p = 0.023$).

60% of women who experienced miscarriage were between 20-30 years of age (Figure 2). Notably, 61.4% ($n = 137$) of participants expressed no difficulty in discussing issues related to their miscarriage. The majority of these women experienced miscarriage within the first trimester, and 70% of them suffered emotional trauma afterward.

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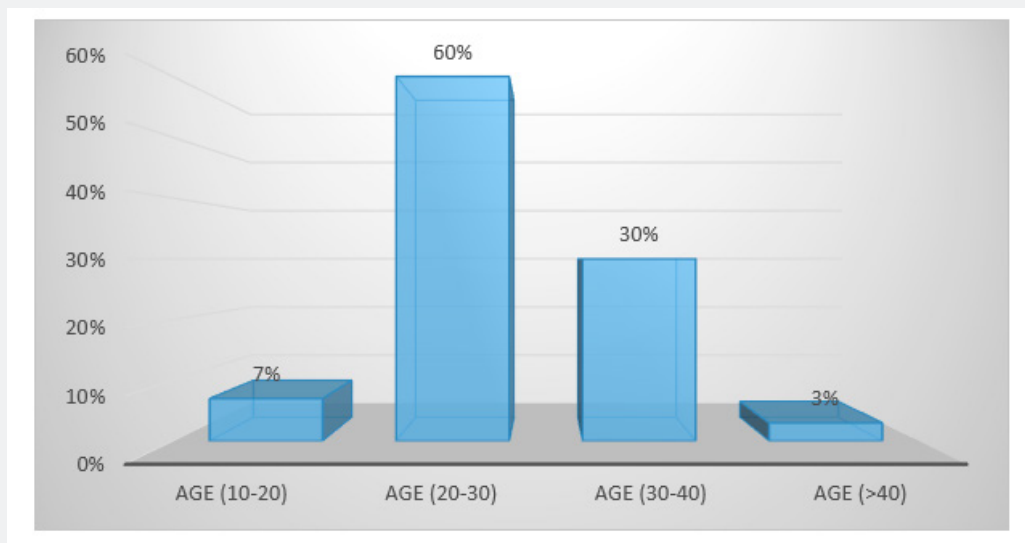


Figure 2: Age when miscarriage was experienced.

Discussion

The findings of this study shed light on the significant emotional burden experienced by women who have undergone miscarriage in Accra, Ghana. The overwhelming majority (81.2%) reported emotional trauma, encompassing feelings of guilt, shame, depression, and doubts about their ability to become mothers. This profound psychological impact is consistent with previous research highlighting the devastating emotional consequences of pregnancy loss [8,9,12]. The study revealed a significant correlation

between maternal age and the number of miscarriages experienced, aligning with existing evidence that advanced maternal age is a well-established risk factor for miscarriage [13,14]. As women age, the quality and quantity of their ovarian reserve decrease, increasing the likelihood of chromosomal abnormalities in the embryo and subsequent pregnancy loss [15,16]. Consequently, women in their late 30s and 40s were found to have experienced recurrent miscarriages more frequently than their younger counterparts.

Notably, a significant proportion (60%) of miscarriages occurred among women aged 20-30 years. While the risk of miscarriage is generally lower in this age group compared to older women [2], several factors may contribute to this finding. Firstly, women in this age range are more likely to be actively pursuing pregnancy, increasing their representation among those experiencing miscarriages [17,18]. Additionally, underlying medical conditions, lifestyle factors, or environmental exposures could play a role, highlighting the need for further investigation into the specific contributors to miscarriage in this age group [19].

The study also revealed a significant correlation between the trimester of miscarriage and the type of treatment received, with misoprostol being widely used for the management of first-trimester miscarriages and D&C (dilation and curettage) being more common for second-trimester losses. This finding aligns with clinical guidelines and standard practices for the management of miscarriages at different gestational ages [20]. Interestingly, the majority (61.4%) of participants expressed no difficulty in discussing their miscarriage experience, suggesting a potential shift in societal attitudes and a willingness to openly address this often-stigmatized topic. However, it is noteworthy that 70% of these women had suffered emotional trauma, underscoring the importance of providing adequate psychological support and counselling services to mitigate the long-term emotional impact of miscarriage [8,9,12].

More so, a significant correlation between the number of miscarriages, thoughts of miscarriage, and the woman's comfortability in sharing her experience was observed in this study. Women who had experienced multiple miscarriages may have been more hesitant to discuss their experiences due to the compounded emotional burden and potential stigma associated with recurrent pregnancy loss [8,9,21,22].

Conclusion and Recommendations

This study has shed light on the significant emotional burden experienced by women in Accra who have undergone miscarriage. The findings highlight the profound psychological impact of pregnancy loss, with a majority of participants reporting feelings of guilt, shame, depression, and doubts about their ability to become mothers. The study also established a clear link between maternal age and the risk of miscarriage, underscoring the importance of educating women about the potential risks associated with delaying childbearing.

Furthermore, the study revealed a correlation between the trimester of miscarriage and the type of treatment received, with misoprostol and dilation and curettage (D&C) being the most common interventions for first and second-trimester losses, respectively. While many participants expressed no difficulty in discussing their miscarriage experience, suggesting a potential shift

in societal attitudes, a significant proportion still experienced emotional trauma, highlighting the need for comprehensive psychological support services.

In the light of the above findings the following recommendations are imperative;

A. Implement public awareness campaigns and educational programs to destigmatize miscarriage and promote open dialogue about this often-taboo topic. Such initiatives could be integrated into school curricula, talk shows, and community-based campaigns.

B. Establish support groups and counselling services specifically tailored to women who have experienced miscarriage, providing a safe space for them to share their experiences, process their emotions, and receive guidance from mental health professionals.

C. Develop targeted educational programs and reproductive health services that address the increased risk of miscarriage associated with advanced maternal age. These programs should empower women with knowledge about family planning options and facilitate informed decision-making regarding the timing of childbearing.

D. Enhance training for healthcare professionals, particularly obstetricians and gynecologists, to ensure they are equipped with the necessary skills to provide comprehensive care and support to women experiencing miscarriage, including addressing the psychological and emotional aspects of pregnancy loss.

E. Conduct further research to investigate the specific factors contributing to miscarriage among younger women (aged 20-30 years), as well as the potential impact of underlying medical conditions, lifestyle factors, and environmental exposures on the risk of pregnancy loss.

Competing Financial and/or Non-Financial Interests

We declare that the authors have no competing interests, or other interests that might be perceived to influence the results and/or discussion reported in this paper.

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References

1. Kohn I, Moffitt PL, Wilkins IA (2013) *A Silent Sorrow*. Routledge, p. 320.
2. Magnus MC, Wilcox AJ, Morken NH, Weinberg CR, Häberg SE (2019) Role of maternal age and pregnancy history in risk of miscarriage: prospective register-based study. *BMJ* 369: l869.
3. Quenby S, Gallos ID, Dhillon-Smith RK, Podesek M, Stephenson MD, et al. (2021) Miscarriage matters: the epidemiological, physical, psychological, and economic costs of early pregnancy loss. *The Lancet* 397(10285): 1658-1667.

4. Bearak J, Popinchalk A, Ganatra B, Moller AB, Tunçalp Ö, et al. (2020) Unintended pregnancy and abortion by income, region, and the legal status of abortion: estimates from a comprehensive model for 1990-2019. *The Lancet Global Health* 8(9): e1152-e1161.
5. Berer M (2017) Abortion Law and Policy Around the World: In Search of Decriminalization. *Health and Human Rights* 19(1): 13-27.
6. Farren J, Mitchell-Jones N, Verbakel JY, Timmerman D, Jalmbrant M, et al. (2018) The psychological impact of early pregnancy loss. *Human Reproduction Update* 24(6): 731-749.
7. Schreiber CA, Creinin MD, Atrio J, Sonalkar S, Ratcliffe SJ, et al. (2018) Mifepristone Pretreatment for the Medical Management of Early Pregnancy Loss. *New England Journal of Medicine* 378(23): 2161-2170.
8. Aydin R, Körükcü Ö, Kabukcuoğlu K (2019) Investigation of the Experiences of Mothers Living Through Prenatal Loss Incidents: A Qualitative Study. *Journal of Nursing Research* 27(3): e22.
9. Bardos J, Hercz D, Friedenthal J, Missmer SA, Williams Z (2015) A National Survey on Public Perceptions of Miscarriage. *Obstetrics & Gynecology* 125(6): 1313-1320.
10. Haws RA, Mashasi I, Mrisho M, Schellenberg JA, Darmstadt GL, et al. (2010) These are not good things for other people to know: How rural Tanzanian women's experiences of pregnancy loss and early neonatal death may impact survey data quality. *Social Science & Medicine* 71(10): 1764-1772.
11. Inhorn MC, Patrizio P (2015) Infertility around the globe: new thinking on gender, reproductive technologies and global movements in the 21st century. *Human Reproduction Update* 21(4): 411-426.
12. Broen AN, Moum T, Bødtker AS, Ekeberg Ö (2005) Reasons for induced abortion and their relation to women's emotional distress: a prospective, two-year follow-up study. *General Hospital Psychiatry* 27(1): 36-43.
13. Andersen AMN (2000) Maternal age and fetal loss: population based register linkage study. *BMJ* 320(7251): 1708-1712.
14. Cleary-Goldman J, Malone FD, Vidaver J, Ball RH, Nyberg DA, et al. (2005) Impact of Maternal Age on Obstetric Outcome. *Obstetrics & Gynecology* 105(5 Part 1): 983-990.
15. Cimadomo D, Fabozzi G, Vaiarelli A, Ubaldi N, Ubaldi FM, et al. (2018) Impact of Maternal Age on Oocyte and Embryo Competence. *Frontiers in Endocrinology* 9.
16. Gruhn JR, Zielinska AP, Shukla V, Blanshard R, Capalbo A, et al. (2019) Chromosome errors in human eggs shape natural fertility over reproductive life span. *Science* 365(6460): 1466-1469.
17. Cohain JS, Buxbaum RE, Mankuta D (2017) Spontaneous first trimester miscarriage rates per woman among parous women with 1 or more pregnancies of 24 weeks or more. *BMC Pregnancy and Childbirth* 17(1): 437.
18. Feodor Nilsson S, Andersen P, Strandberg-Larsen K, Nybo Andersen A (2014) Risk factors for miscarriage from a prevention perspective: a nationwide follow-up study. *BJOG: An International Journal of Obstetrics & Gynecology* 121(11): 1375-1385.
19. Ammon Avalos L, Galindo C, Li D (2012) A systematic review to calculate background miscarriage rates using life table analysis. *Birth Defects Research Part A: Clinical and Molecular Teratology* 94(6): 417-423.
20. Nanda K, Lopez LM, Grimes DA, Peloggia A, Nanda G (2012) Expectant care versus surgical treatment for miscarriage. *Cochrane Database of Systematic Reviews* CD003518.
21. Farren J, Jalmbrant M, Falconieri N, Mitchell-Jones N, Bobdiwala S, et al. (2020) Posttraumatic stress, anxiety and depression following miscarriage and ectopic pregnancy: a multicenter, prospective, cohort study. *American Journal of Obstetrics and Gynecology* 222(4): 367.e1-367.e22.
22. Séjourné N, Callahan S, Chabrol H (2010) Support following miscarriage: what women want. *Journal of Reproductive and Infant Psychology* 28(4): 403-411.



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