Special journal of the Medical Academy and other Life Sciences
Vol. 1 No. 7 (2023) 08/20/2023
DOI: https://doi.org/10.58676/sjmas.v1i7.43

A Case Study of Miscarriage Issues among Women in Developing Countries

Felicity Otibhor[1], Ghassan Salibi[2],
[1] Kursk State Medical. University
[1,2] Charisma University

Special journal of the Medical Academy and other Life Sciences
Vol. 1 No. 7 (2023) 08/20/2023
DOI: https://doi.org/10.58676/sjmas.v1i7.43

Abstract
Spontaneous abortion is a health issue that is prevalent among different countries. Presently, spontaneous abortion attests to a progressive increase in most developing countries of which our point of discuss borders on Zimbabwe, India and Nigeria. Developing countries are plagued with higher levels of stress in the homes and workplaces and avail little considerations on the health of a pregnant woman and her child. Bringing into focus the meaning and character, as well as the etiology of spontaneous abortion, I will analyze the influencing factors on spontaneous abortion. The actions and strategies to implement to help curb the increased rate of spontaneous abortion should include; implementation of policies to help reduce stress in working environments, especially for the pregnant women, and educational measures to the general public concerning the health of pregnant women.

Keywords: spontaneous abortion, developing countries

Special journal of the Medical Academy and other Life Sciences
Vol. 1 No. 7 (2023) 08/20/2023
DOI: https://doi.org/10.58676/sjmas.v1i7.43

A Comprehensive Definition of Spontaneous Abortion

Spontaneous abortion is also and often referred to as miscarriage. It connotes a pregnancy loss that occurs before the 20th week of gestation, or the expulsion an embryo or fetus weighing 500 g or less, when it is incapable of independent survival. Developing countries are faced with a considerable number of probable health risks. One of such prevalent health risk is the issue of spontaneous abortion. On the border of ignorance and various lacks of intentional safety measures, spontaneous abortion will unequivocally verge on an increase in its rate of occurrence amongst developing countries.

Spontaneous abortion includes different types. It could be threatened abortion, inevitable abortion, complete abortion, incomplete abortion, septic abortion or missed abortion. In inevitable abortion, the process of miscarriage has commenced, but it has not proceeded to a point at which recovery is impossible, as opposed to inevitable abortion where the changes will certainly lead to the termination of the pregnancy. In incomplete abortion, all products of conception have not been ejected from the womb, in contrast with complete abortion where all products of conception have been evacuated from the womb. In missed abortion, the fetus is dead, but remains in the uterus for a considerable time, due to lack of clinical signs of a miscarriage.

The clinical symptoms of spontaneous abortion are mostly always evident, depending on the type of abortion. The clinical symptoms observed ranges from lower abdominal pain, persistence of brown vaginal discharge, vaginal bleeding, subsidence of pregnancy symptoms, regression of breast changes and subsidence of pregnancy symptoms. Further diagnostic testing will help confirm the occurrence of a miscarriage.

It is of utmost importance that mothers and in fact, the general inhabitants of developing countries are enlightened on maternal and fetal health during pregnancy, to help curb increase in fetal deaths and ensure the health and of the mother.

Overview of spontaneous abortion in developing countries:

This presentation sheds light on the relationship between spontaneous abortion and developing countries. While it is common knowledge that spontaneous abortion can occur in persons of different regions, and indeed, does occur in every region all around the world, our focus shall be on the developing countries; which is plagued by an increasing rate of occurrence, especially when compared to that of developed countries.

Miscarriage Issues among Women in Developing Countries. In India, population-based study was conducted in Belagavi District, south India on women of childbearing age. All women were officially registered in the survey during the course of their pregnancy. In Zimbabwe, a cluster- randomized trial was organized by the Sanitation Hygiene Infant Nutrition Efficacy (SHINE). The trial investigated 5280 pregnant women. The time range was from 22 November 2012 to 27 March 2015. The trial was done to determine the impact of refined water supply, sanitation and hygiene on child growth and anemia. A secondary analysis was done to evaluate the prevalence and risk factors of miscarriage. In Nigeria, 2018, 1564 pregnant women were studied with respect to environmental pollution.

In India, a total of 30,166 women were registered from 2014 to 2017 in this survey. The rate of spontaneous abortion per 1000 ongoing pregnancies between 6 and 8 weeks was 115.3, between

Special journal of the Medical Academy and other Life Sciences
Vol. 1 No. 7 (2023) 08/20/2023
DOI: https://doi.org/10.58676/sjmas.v1i7.43

8 and 12 weeks the spontaneous abortion rate was 101.9 per 1000 ongoing pregnancies and between 12 and 20 weeks the miscarriage rate was 60.3 per 1000 ongoing pregnancies. Women who experienced a miscarriage were older and had a higher level of education but were less likely to be anemic than those with an ongoing pregnancy at 20 weeks. The rates and risk factors of miscarriage between 6weeks of gestation and 20 weeks gestation were assessed. A hypothetical cohort of 1000 women pregnant at 6 weeks was created to demonstrate the impact of miscarriage on pregnancy outcome. In Zimbabwe, the prevalence of adverse birth outcomes was: miscarriage: 5.0% [95% confidence interval (CI)].Modifiable liabilities included maternal anemia, HIV infection and lack of antenatal care. In Nigeria, Women with high exposure to oil pollution were at higher risk of having a miscarriage. In India, for women with an ongoing pregnancy at 6 weeks, about 60% will have a living infant at 28 days of age. Two thirds of the losses were spontaneous miscarriages. High maternal age and education were the risk factors connected with miscarriage.

Determinants of health of pregnant women in developing countries. Although there is not enough data on miscarriage issues in these countries, widespread factors leading to spontaneous abortion in these developing countries included sociological and demographic factors including maternal and paternal age, marital status, race and ethnicity, level of education, religion, professional status and family income, personal health and professional situation. Women of lower socio-economic status are at higher risk of spontaneous abortion the main reason was unplanned pregnancy, low level of education and lack of contraceptive use. Age is also a prevalent risk factor affiliated with abortion. The surveys done disclose that women of more advanced age are at a higher risk to experience spontaneous abortion when compared with middle aged and younger women. Women with lifestyles of risk, such as, those adverse occupational exposures have negative outcome on fetal growth and development during pregnancy and in often case can lead to miscarriage. Women who were in contact with harmful chemical agents such as heavy metals, pesticides, solvents, Harmful drugs, ionizing as well as non-ionizing radiation were often at risk of developing spontaneous abortion. Women often in harmful physical conditions, ranging from extreme heat and cold, as well as women who were working under various sorts of occupational stress and strenuous conditions, including; prolonged standing positions, lifting of heavy objects and repeated bending movements and were at risk of having spontaneous abortion.

Strategies to implement to reduce miscarriages in developing countries:

Miscarriages are associated with various negative health condition and situations, amongst which can range from physical, such as bleeding or infection, and psychological consequences, including a catapulted rate of depression, anxiety, post-traumatic stress disorder, and suicide, as well as an increased risk of recurrent spontaneous abortion, obstetrical complications namely preterm pregnancy, abruption of placenta, restriction of fetal growth, and stillbirth in subsequent pregnancies, a sentinel of distant-future health problems such as cardiovascular disease and venous thromboembolism. The costs of miscarriage also have an effect on individuals, health-care systems, and society. Diverse measures should be taken in order to avert the high incidence of miscarriage and its negative consequences. Governmental measures are an integral part in ensuring the prevention of miscarriages during pregnancy.

Special journal of the Medical Academy and other Life Sciences
Vol. 1 No. 7 (2023) 08/20/2023
DOI: https://doi.org/10.58676/sjmas.v1i7.43

Firstly, government should ensure that policies are put in place to ensure that safe working environments for pregnant women are met. Sufficient funds and resources should be channeled to ensure that designs, plans and principles are put in place to make certain that factors leading to the increased rate of miscarriages are lowered. Pregnant women at early terms should be exempted from tedious works, such as carrying heavy loads and also restricted from practices that would involve standing for a long period of time in the working place. Reduced working hours for pregnant women at early terms should be implemented and strictly followed. A safe working environment, free from chemical pollutants such as detergents, formaldehyde, benzene, and environmental hazards such as radiation waves, smokes and infectious diseases, should be guaranteed. The workplace should be well ventilated, spacious and stress free. Expectant women at later terms of the pregnancy period should be given time off from work, to ensure that the women are well taken care of and have enough time for rest and personal care. Also, education of the public on the need for early antenatal visits, as well as, the importance of ensuring special care for pregnant women should be taught among the communities and across these countries. The healthcare systems should pay also close monitoring of the mother and child health. The expecting mothers should be appropriately lectured and on the need to ensure safe and healthy practices during the course of their gravidity. Comprehensive prenatal care and the need for healthy personal practices such as eating well-balanced diets, moderate exercise, maintaining a clean and safe environment, avoidance of drugs, smoking, and alcohol should be addressed. Appropriate medical check-ups should be done by medical personnel and adequate supplementation of vitamins such as folic acid and other multivitamins should be given. Special care should be accrued to women of higher age to ensure healthy and successful pregnancy and delivery. Medications in the likes of progesterone can also be administered, in line with the prevention of recurrent miscarriages. Preexisting medical conditions in pregnant women such as diabetes, hypertension, hypothyroidism, and autoimmune illnesses should be addressed and well-controlled. Competent help for stress management should be provided to pregnant women.

In conclusion, the issue of spontaneous abortion is a public health problem amongst developing countries. Extra measures should be put in place to curb the increasing rate of miscarriages in developing countries. Pregnant women in developing countries such as Nigeria, Zimbabwe and India face problems such as stressful and deleterious environment, unhealthy diets, water supply and lifestyle which expose them to higher risks of spontaneous abortion during the course of their pregnancy. Development and enactment of healthy policies, regulatory principles and laws is needed to ensure that pregnant women receive all available assistance, to make certain of their safe deliveries.

Special journal of the Medical Academy and other Life Sciences
Vol. 1 No. 7 (2023) 08/20/2023
DOI: https://doi.org/10.58676/sjmas.v1i7.43

References

1. Quenby, S., Gallos, I. D., Dhillon-Smith, R. K., Podesek, M., Stephenson, M. D., Fisher, J., Brosens, J. J., Brewin, J., Ramhorst, R., Lucas, E. S., McCoy, R. C., Anderson, R., Daher, S., Regan, L., Al-Memar, M., Bourne, T., MacIntyre, D. A., Rai, R., Christiansen, O. B., Sugiura-Ogasawara, M., … Coomarasamy, A. (2021). Miscarriage matters: the epidemiological, physical, psychological, and economic costs of early pregnancy loss. *Lancet (London, England)*, *397*(10285), 1658–1667. https://doi.org/10.1016/S0140-6736(21)00682-6
2. Dhaded, S. M., Somannavar, M. S., Jacob, J. P., McClure, E. M., Vernekar, S. S., Yogesh Kumar, S., Kavi, A., Ramadurg, U. Y., Moore, J. L., Wallace, D. P., Derman, R. J., Goldenberg, R. L., & Goudar, S. S. (2018). Early pregnancy loss in Belagavi, Karnataka, India 2014-2017: a prospective population-based observational study in a low-resource setting. *Reproductive health*, *15*(Suppl 1), 95. https://doi.org/10.1186/s12978-018-0525-4
3. Chasekwa, B., Ntozini, R., Church, J. A., Majo, F. D., Tavengwa, N., Mutasa, B., Noble, C., Koyratty, N., Maluccio, J. A., Prendergast, A. J., Humphrey, J. H., Smith, L. E., & Sanitation Hygiene Infant Nutrition Efficacy (SHINE) Trial Team (2022). Prevalence, risk factors and short-term consequences of adverse birth outcomes in Zimbabwean pregnant women: a secondary analysis of a cluster-randomized trial. *International journal of epidemiology*, *51*(6), 1785–1799. https://doi.org/10.1093/ije/dyab248
4. Kamble G, Bhattacharya BM. Miscarriage and associated risk factors in India: a brief review. MOJ Womens Health. 2017;4(4):84–86. https://doi.org/10.15406/mojwh.2017.04.00090
5. Balogun, O. O., da Silva Lopes, K., Ota, E., Takemoto, Y., Rumbold, A., Takegata, M., & Mori, R. (2016). Vitamin supplementation for preventing miscarriage. *The Cochrane database of systematic reviews*, *2016*(5), CD004073. https://doi.org/10.1002/14651858.CD004073.pub4
6. Haas DM, Hathaway TJ, Ramsey PS. Progestogen for preventing miscarriage in women with recurrent miscarriage of unclear etiology. Cochrane Database of Systematic Reviews 2019, Issue 11. Art. No.: CD003511. https://doi.org/10.1002/14651858.CD003511.pub5
7. Oghenetega, O. B., Ana, G. R. E. E., Okunlola, M. A., & Ojengbede, O. A. (2020). Miscarriage, stillbirth, and infant death in an oil-polluted region of the Niger Delta, Nigeria: A retrospective cohort study. *International journal of gynaecology and obstetrics: the official organ of the International Federation of Gynaecology and Obstetrics*, *150*(3), 361–367. https://doi.org/10.1002/ijgo.13259
8. Ghosh, J., Papadopoulou, A., Devall, A. J., Jeffery, H. C., Beeson, L. E., Do, V., Price, M. J., Tobias, A., Tunçalp, Ö., Lavelanet, A., Gülmezoglu, A. M., Coomarasamy, A., & Gallos, I. D. (2021). Methods for managing miscarriage: a network meta-analysis. *The Cochrane database of systematic reviews*, *6*(6), CD012602. https://doi.org/10.1002/14651858.CD012602.pub2
9. du Fossé, N. A., van der Hoorn, M. P., van Lith, J. M. M., le Cessie, S., & Lashley, E. E. L. O. (2020). Advanced paternal age is associated with an increased risk of spontaneous

Vol. 1 No. 7 (2023) 08/20/2023
DOI: https://doi.org/10.58676/sjmas.v1i7.43

miscarriage: a systematic review and meta-analysis. *Human reproduction update*, *26*(5), 650–669. https://doi.org/10.1093/humupd/dmaa010

10. Grippo, A., Zhang, J., Chu, L., Guo, Y., Qiao, L., Zhang, J., Myneni, A. A., & Mu, L. (2018). Air pollution exposure during pregnancy and spontaneous abortion and stillbirth. *Reviews on environmental health*, *33*(3), 247–264. https://doi.org/10.1515/reveh-2017-0033

Special journal of the Medical Academy and other Life Sciences
Vol. 1 No. 7 (2023) 08/20/2023
DOI: https://doi.org/10.58676/sjmas.v1i7.43