Review Article

The future effects of multiple Caesarean section on women in Ghana

Abstract

According to the World Health Organisation, when vaginal births offer risks, emergency caesarean sections are a lifesaver and should be readily available in all health care settings However, there are still regions of the globe where citizens do not have automatic access to a secure CS. New study from the World Health Organization (WHO) shows that caesarean sections are increasingly common around the world, making up more than 1 in 5 (21%) pregnancies. Infection, bleeding, visceral damage, placenta accrete, and maternal abruption are all possible complications in the near term. The main objective of this study is to examine the effect of multiple caesarean section on mothers in Ghana.
This study utilised previously collected information on respiratory tract illnesses in children under the age of five. This includes previously published papers, dissertations, and internet resources such as books and websites. This technique is referred to as the systematic method.
there are complications when it comes to multiple CSs. These includes damage to the bowels and bladder, as well as significant bleeding. Others include uterine rupture, infection, haemorrhage, thrombosis, and peripheral organ injury.
This study recommended that, there should be increase public awareness of CS signs through mass media (radio, TV, social media) to garner family and community support for women enduring CS.

Keywords: Caesarean section, Women, Ghana

1.0 INTRODUCTION

According to the World Health Organisation, when vaginal births offer risks, emergency caesarean sections are a lifesaver and should be readily available in all health care settings (World Health ORganisation, 2021). In a caesarean section, the uterus and abdomen wall are cut open to birth the foetus(hysterotomy). In order to perform a caesarean section, the physician must break through all of the barriers between the mother and the foetus. The incision is made through the epidermis and then into the subcutaneous tissues. Fascia, which covers the abdominal muscles (rectus abdominis), is the next layer. There are typically two layers of fascia in the inner abdomen wall. The first layer is made up of the aponeurosis of the external oblique rectus muscle, and the second layer is made up of the aponeuroses of the transverse abdominis and internal oblique muscles that have merged together. The cephalad-caudal rectus muscles are divided so that the physician can access the abdominal region through the parietal peritoneum. The background of the caesarean segment (CS) dates back hundreds of years. In the past, this procedure was only performed on women who were near death in a last-ditch effort to save their unborn child (or so that the mother's body could be buried separately from her child). In today's world, CS fertility rates continue to rise in both high- and middle-income nations. However, there are still regions of the globe where citizens

do not have automatic access to a secure CS. In 2015, the World Health Organization recommended that CS rates no higher than 10% not be linked with reduced maternal or new-born mortality. This disparity and the steep rise in CS rates do not seem to be justified by this statement. When global CS rates are considered, the gravity of the situation becomes clear (WHO, 2018).

New study from the World Health Organization (WHO) shows that caesarean sections are increasingly common around the world, making up more than 1 in 5 (21%) pregnancies. The study indicates that this trend will continue to rise over the next decade, with caesarean sections accounting for nearly a third (29%) of all deliveries by 2030 (World Health ORganisation, 2021). Although caesarean sections are sometimes required and even lifesaving, they should not be done unless absolutely necessary to prevent serious complications for the mother and child (World Health ORganisation, 2021). The availability of caesarean sections for pregnant women varies widely across the globe. Only about 5% of births in sub-Saharan Africa are performed via caesarean section, highlighting a worrying dearth of access to this potentially life-saving procedure in the world's poorest regions. However, this figure rises to nearly half (46%) in Latin America and the Caribbean. There are now more caesarean sections than natural births in five countries: the Dominican Republic, Brazil, Cyprus, Egypt, and Turkey. From about 7% in 1990 to 21% now, the incidence of caesarean sections has increased dramatically, and this trend is expected to continue over the next decade. Eastern Asia (63%), Latin America and the Caribbean (54%), Western Asia (50%), Northern Africa (48%), Southern Europe (47%), and Australia and New Zealand (45%) are predicted to have the greatest rates by 2030 if current trends persist.

There are many challenges that women go through during delivery. One of these challenges is maternal mortality. Most maternal deaths happen during or immediately after birth. Maternal mortality refers to the passing of a pregnant woman or a woman who has had her pregnancy terminated within the first 42 days of life (Manyeh, et al., 2018). This meaning is not conditional on the mother's place of residence or the length of her pregnancy. There is no correlation between pregnancy or prenatal care and this complication. However, it doesn't cover unintentional or casual deaths (Ugwu & de Kok, 2015). A staggering 99 percent of all maternal fatalities occur in low and middle-income nations (LMICs). Access to and quality of prenatal care are major variables in reducing maternal mortality rates in low- and middle-income countries (LMICs) like Ghana. Weak system of roads and insufficient infrastructure (Boz, Teskereci, & Akman, 2016). Choosing a safe and socially acceptable method of childbirth is a major challenge for many mothers. When labour time nears, women must make a difficult decision between a natural birth and a Cesarean section. Women would typically prefer a natural vaginal delivery, but there are a variety of reasons why they might choose an assisted or caesarean section (Betran, et al., 2016).

Low priority of enhancing women's own abilities to give birth, negative effects of common labour interventions, refusal to offer the informed choice of vaginal birth, blasé attitudes towards surgery and variation in professional practise style, limited awareness of harm more likely with CS, and incentives to practise in a manner that is efficient for providers are all factors that contribute to the high rates of CS in countries with a high prevalence of CD (Amjad, et al., 2018). The socioeconomic status, maternal educational level (Harrison & Goldenberg, 2016), maternal request (Stanton, et al., 2013), and wealth status (Amjad, et al., 2018) have also been found to be related to CS. Other factors include: age (Al Rifai, 2017), birth order (Manyeh, Amu, Akpakli, Williams, & Gyapong, 2018), birth weight (World Health Organization, 2010), place of residence, region of residence (Amjad, et al., 2018), and

socioeconomic status. However, the WHO's minimal acceptable CD rate of 5% is significantly lower than the numbers reported by the vast majority of LMICS. Rates of caesarean delivery (CD) hover around 1% in many low- and middle-income countries (LMICs) like Niger, Ethiopia, and Madagascar. It is well-established that major barriers to providing CD to women in need exist in most LMICs, including a lack of access to healthcare, a weak healthcare system, inadequate health infrastructure, geographical barriers, cultural factors, poverty, and a lack of human resources (Al Rifai, 2017).

It is widely agreed that all women who need CS should have access to it (Boerma, Ronsmans, & Melesse, 2018). It is worth noting that CS does not just improve the mother's health, but the child's as well (Bishop, Dyer, & Maswime, 2019). Fetal distress, placenta previa, eclampsia, umbilical chord prolapse, threatened uterine rupture, and cephalopelvic disproportion are all absolute and relative signals for CS (Yaya, Uthman, OA, Amouzou, & Bishwajit, 2018). Although there are advantages to CS when it is medically necessary, it is important to remember that CS is linked to serious complications like intraoperative and postoperative bleeding and increased risks of maternal mortality, especially in places like sa where obstetric morbidities are extremely high (Dikete, Coppieters, & Trigaux, 2019). However, in recent years, planned CS has become increasingly common as an option to vaginal delivery (Belizán, Minckas, & McClure, 2018). Women in northern Ghana, for example, prefer vaginal delivery to other birthing techniques because they view it as more secure, more natural, and more suitable to a speedy recovery (Walana, Acquah, Ziem, & Vicar, 2017). In addition, vaginal is popular among women because of the belief that it facilitates maternal-child attachment. Women chose CS because they believed it was safe, because they wanted a quick and easy delivery free of discomfort and tension, and because they wanted a positive birth experience (Diema, Baku, Japiong, Dodam Konlan, & Amoah, 2019). Most women now prefer CS to vaginal delivery and the rate at which this is increasing in Ghana is very alarming.

Infection, bleeding, visceral damage, placenta accrete, and maternal abruption are all possible complications in the near term (Keag & Norman, 2018). Asthma and weight are among the long-term risks (Keag & Norman, 2018). Additionally, women with CS have an increased risk of having a second loss, ectopic pregnancy, or stillbirth (Bowman, Smith, & Silver, 2015).In addition, women with a history of CS are more likely to experience placental accrete, placental abruption, and uterine perforation than vaginal delivery (Jackson, et al., 2012). Nonetheless, there is a lack of research in Ghana into how CS affects maternal physical and mental health issues for mothers and their children in the long run. There are some gaps in knowledge and uncertainty among many obstetricians about the risks associated with numerous caesarean sections, particularly when the number exceeds four, despite the fact that caesarean section is now safer than it has ever been. The main objective of this study is to examine the effect of multiple caesarean section on mothers in Ghana.

2.0 METHODS

Research methods may be considered of as the tactics, processes, or techniques that are employed in the process of gathering data or evidence for the goal of analysis in order to either develop new information or a deeper understanding of a topic. This study utilised previously collected information on respiratory tract illnesses in children under the age of five. This includes previously published papers, dissertations, and internet resources such as books and websites. This technique is referred to as the systematic method. A "systematic

review" is a special type of review that use a predefined and methodical technique to collect and assess data in order to reach conclusions on research issues. The term "systematic review" refers to a certain review method. A systematic review is a comprehensive analysis and synthesis of the relevant published literature on a specific topic or clinical issue. Alternatively known as a meta-analysis. For the purpose of enhancing scientific writing, a step-by-step method to doing a systematic review has been presented. Not only can systematic reviews provide the evidence foundation for knowledge translation products such as patient decision aids, clinical practise guidelines, and policy briefs, but they can also help decision-makers better comprehend the conclusions of individual research in the context of the overall data. Rapid review, a subset of systematic review, was employed in this investigation. Rapid reviews can be considered a sort of knowledge synthesis in order to provide information in a timely way. Certain components of the procedure for performing systematic reviews are either shortened or eliminated in quick reviews. During the search for data, the keywords; Caesarean section, Women and Ghana were the main focus.

The table below provides a summary of the research articles, books, internet resources, and data utilised by the study to reach its conclusions. This table will help get in summary, what other writers say about the long time effect of CS based on their works on CS.

Table 1:Summary of the research articles, books, internet resources, and data

No	Topic	Author(s)	Year	Country	Method	Results
1	*"Medical and non-medical reasons for cesarean section delivery in Egypt: a hospital-based retrospective study"*	Shatha Elnakib, Nahla Abdel-Tawab, Doaa Orbay & Nevine Hassanein	2019	Egypt	Medical records for all births that occurred in April 2016 in 13 public hospitals across four governorates in Egypt (Cairo, Alexandria, Assiut, and Behera) were examined, and data on medical reasons and obstetric features of the mothers giving birth were retrieved.	Several obstetric risk variables, such as prior CS, maternal age, and nulliparity, were found to raise the chances of CS method of delivery in a multilevel analysis, while others, such as partograph completion and oxytocin use, were found to decrease the odds of CS. Non-medical variables, such as a convenience incentive, a lack of oversight and training in public institutions, and a lack of familiarity with clinical standards were identified through interviews with obstetricians as contributing to the high CS rates.
2	*"Women's perspectives on caesarean section recovery, infection and the PREPS trial: a qualitative pilot study"*	Annalise Weckesser, Nicola Farmer, Rinita Dam, Amie Wilson, Victoria Hodgetts Morton & R. Katie Morris	2019	London	Between September and October of 2017, 21 women who had a CS within the previous six months participated in two discussion groups and six telephone interviews using qualitative methods.	After CS, women cared most about pain management, movement, and getting back to regular life, including caring. First-time CS patients reported lacking confidence in their ability to recognise the early warning symptoms of infection and sought the advice and support of visiting health experts. Many women said they did not receive enough guidance on how to avoid infections, and they couldn't

						remember if they'd been given any.
3	*"Caesarean delivery and its association with educational attainment, wealth index, and place of residence in Sub-Saharan Africa: a meta-analysis"*	Md.Akhtarul Islam, Nusrat Jahan Sathi, Md. Tanvir Hossain, Abdul Jabbar, Andre M. N. Renzaho & Sheikh Mohammed Shariful Islam	2022	Sub-Saharan Africa	A meta-analysis	Sub-regional meta-analyses yielded similar findings. According to a meta-regression analysis, there is a statistically significant negative relationship between the proportion of births attended by skilled health workers (TPBASHS) and the use of caesarean sections across demographics of respondent and spouse schooling, location, and income.
4	*"Caesarean section rates continue to rise, amid growing inequalities in access"*	World Health Organisation	2021	Worldwide	Qualitative study	More than one-fifth (21%) of all deliveries are now performed via caesarean section, a statistic that continues to increase worldwide. The study indicates that this trend will continue to rise over the next decade, with caesarean sections accounting for nearly a third (29%) of all deliveries by 2030.
5	*"Caesarean section epidemic: Tackling the rise of unnecessary cuts*"	Renata Josi	2019	Worldwide	Literature review	There has been the rise of CS around the world
6	*"Cesarean Section"*	Sharon Sung; Heba Mahdy.	2022	Worldwide	Literature review	The choices taken during a caesarean section have long-lasting consequences for the mother and her family. Evidence-based

						preoperative and intraoperative treatment for women requiring a caesarean section are discussed, along with the importance of the interdisciplinary team.
7	*"Not just numbers: beyond counting caesarean deliveries to understanding their determinants in Ghana using a population based cross-sectional study"*	Abdul-Aziz Seidu, John Elvis Hagan Jr., Wonder Agbemavi, Bright Opoku Ahinkorah, Edmond Banafo Nartey, Eugene Budu, Francis Sambah & Thomas Schack	2020	Ghana	Statistics from the Ghana Demographic and Health Survey in 2014 were analysed for this research. Only women who had given birth in a medical facility within the previous five years (n = 2752) were included in the study. Using a binary logistic regression, we calculated adjusted odds ratios (AOR) and 95% confidence intervals to examine the relationship between CD and its potential causes.	Nearly one-fifth (18.5%) of all births involved a caesarean section (CS). Women between the ages of 45 and 49 had a greater likelihood of giving birth via CS (AOR = 10.5, 95% CI = 3.0 to 37.4), and those who reside in households headed by women had a higher likelihood of giving birth via CS (AOR = 1.3, 95% CI = 1.1 to 1.7). Lower chances of CS delivery were observed among women living in the Upper East (AOR =0.4; 95% CI = 0.2-0.7) and Upper West (AOR =0.4; 95% CI = 0.2-0.8). The adjusted odds ratio for CD among women who had four or more children was lower than among those who had only one (AOR = 0.3; 95% CI = 0.2-0.5). The likelihood of a CS delivery was reduced for women expecting a female child (AOR = 0.8; CI = 0.7-0.9) compared to women expecting a male child.
8	*"Knowledge construction of*	Joana Amike, Adadow	2022	Ghana	Women living in the Tamale Metropolitan Area were the	Many people understood Caesarean Section risks and

	Caesarean Section among women in Northern Ghana"	Yidana			subjects of a detailed cross-sectional research conducted at a local hospital. A phenomenological approach was used for the research. Women who had a Caesarean section were the subjects of four separate study groups.	impacts. The study hospital's emergency cases prevented caesarean section veterans from declining. Friends and family affected caesarean segment beliefs. Cesarean sections were avoided due to fear of complications, uncertainty about pain during and after the operation, and the fact that they are not normal. As a result of conditioning, Caesarean-sectioned women are mocked in their societies.
9	*"Inequalities in prevalence of birth by caesarean section in Ghana from 1998-2014"*	Joshua Okyere, Henry Ofori Duah, Abdul-Aziz Seidu, Bright Opoku Ahinkorah & Eugene Budu	2022	Ghana	CS examined birth disparity data from the 1998-2014 Ghana Demographic and Health Surveys (GDHS) using the WHO Health Equity Assessment Toolkit (HEAT) software. We first disaggregated birth by CS by wealth index, schooling, residence, and area. Second, we assessed inequality using basic unweighted measures (Difference (D) and Ratio (R)) and complex weighted measures (Population Attributable Risk (PAR) and Population Attributable Fraction (PAF)). Point values had a 95% confidence range	Results suggest that more work is needed to provide maternity care to all subpopulations that need medically required CS to reduce maternal and perinatal deaths. We recommend CS only when medically necessary due to its risks.

					for statistical significance.	
10	*"Factors influencing preference of birth method among pregnant women: a descriptive cross-sectional study in a tertiary health facility in Ghana"*	Judith A. Anaman-Torgbor, Kennedy Diema Konlan, Emmanuella Owusu, and Bright Gbagbo	2022	Ghana	Descriptive cross-sectional study	Women are more likely to choose SVD for future pregnancies if they have already given birth via SVD, and this probability increases with increasing parity.
11	*"Long-term effects of caesarean delivery on health and behavioural outcomes of the mother and child in Bangladesh"*	Mostafizur Rahman, Nuruzzaman Khan, Aminur Rahman, Mahmudul Alam & Alam Khan	2022	Bangladesh	Community-based case–control study from May to August 2019. A systematic questionnaire was used to survey 600 mother–child dyads, 300 of which had CS and 300 VD in their most recent live births. The exposure variable was mode of delivery: 1 for CS, 0 for VD. Health and behavioural issues of moms and toddlers were the outcome factors. After adjusting for variables, a multivariate or multiple logistic regression model was used to assess the impact of exposure variable on outcome variable for each health and behavioural result.	The average mother was 53.1 kilogrammes and 25.1 years old. Mothers who had CS rather than VD during their most recent live birth were more likely to experience headaches, hip discomfort after delivery, difficulty with everyday tasks, and difficulties breastfeeding. Similarly, parents of children delivered via CS reported that their children had more difficulty breathing, were sick more often, ate less, and slept less than average.

Source: Compiled by the author

3.0 DISCUSSION

This section will discuss caesarean section and some finding from authors on the long-term effect of multiple caesarean sections of women in Ghana. From the table above, many writers have spoken about caesarean section as an alternative means of child delivery. Shatha Elnakib, Nahla Abdel-Tawab, Doaa Orbay & Nevine Hassanein studied the medical and non-medical reasons for cesarean section delivery in Egypt (Elnakib, Abdel-Tawab, & Orbay, 2019). The study concluded that, the worldwide increase in CS has complex causes, some of which are related to medical practise and others that are purely socioeconomic (Elnakib, Abdel-Tawab, & Orbay, 2019). Increased CS rates are attributable to a number of factors, including but not limited to changes in women's risk characteristics, an ostensible rise in medical indications, and non-medical reasons such as social, societal, and economic factors. The "physician factor," which places blame on physicians and hospitals rather than maternal risk factors, has also been linked to rising CS rates (Oner, Catak, Sütlü, & Kilinç, 2016).

It was also concluded in one study that (Weckesser, et al., 19), after CS, women cared most about pain management, movement, and getting back to regular life, including caring. First-time CS patients reported lacking confidence in their ability to recognise the early warning symptoms of infection and sought the advice and support of visiting health experts. Many women said they didn't receive enough guidance on how to avoid infections, and they couldn't remember if they'd been given any. There were reports of people getting varying quality basic information about CS rehabilitation. The PREPS study aims to reduce the chance of uterine infection after caesarean section, but most women are unaware that this is a concern (Weckesser, et al., 19). To avoid these probable future complications of CS, one study (Akhtarul, et al., 2012) suggested that, in order to reduce maternal and new-born mortality rates in remote, ignorant, and economically disadvantaged areas of Sub-Saharan Africa, it is crucial to provide access to suitable lifesaving mechanisms, such as C-section delivery opportunities, through adequate facilities.

Nevertheless, other writers suggest that, the choices taken during a caesarean section have long-lasting consequences for the mother and her family (Okyere, Duah, & Seidu, 2022). More effort is needed to guarantee that all subpopulations that require medically required CS have access to maternity care in order to decrease maternal and perinatal mortality. This is because women are more likely to choose vaginal delivery for future pregnancies if they have already given birth via vaginal delivery, and this probability increases with increasing parity. More antenatal education on the various birthing options and the health advantages of nurses is necessary so that future mothers can make well-informed decisions (Sharon & Heba, 2022).

In all, the writers examine CS, its benefits and its future consequences. Now let look at the future effect of multiple CS on women in Ghana. Nevertheless, (Biler, et al., 2017) with the exception of the incidence of intra-abdominal adhesions, it appears that having four or more CSs does not raise the risk of maternal complications. It is important to remember that CS is an operative birth with risks such as uterine rupture, infection, haemorrhage, thrombosis, and peripheral organ injury, even though there is no notable difference in severe morbidity linked with MRSC. In order to advise ladies on the optimal amount of CSs, more research is necessary (Biler, et al., 2017). The danger of problems rises as the number of CSs performed rises. Research (Alshehri, et al., 2019) found that adhesions and intraoperative bleeding were the most prevalent consequences.

The Health University of Utah conducted a research on multiple CSs. The study found that, C-sections are considered major procedures by medical professionals. If this is not your first effective surgery, you know how long it can take to get back to normal. Possible side effects of a caesarean section include: damage to the bowels and bladder, as well as significant bleeding. When the placenta inserts itself close to the incision from a caesarean section, this is known as placenta accreta. If it remains undetected, you could die from excessive bleeding during a subsequent birth. Half of all deaths were attributed to accreta in the past. Thankfully, today most women do not face an especially high mortality rate. It is recommended to give birth in a hospital with physicians familiar with accreta (Utah, 2023).

The above analyses have shown that, there are complications when it comes to multiple CSs. These includes damage to the bowels and bladder, as well as significant bleeding. Others include uterine rupture, infection, haemorrhage, thrombosis, and peripheral organ injury.

4.0 CONCLUSION

The history of the caesarean section (CS) in human culture is extensive. Caesarean section (CS) is an intervention to reduce maternal and perinatal mortality for pregnancies and labours complicated by complications. In Ghana, there has been an increase in CS because women prefer it to vaginal birth. Despite the benefits of CSs, there are numerous disadvantages associated with multiple CSs. This study recommends that, there should be increase public awareness of CS signs through mass media (radio, TV, social media) to garner family and community support for women enduring CS.

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