SOCIO-ETHICAL ISSUES SURROUNDING CAESAREAN SECTION BIRTHS IN AFRICA

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Abstract

In the last decade, a number of studies have questioned the practice of caesarean section birth in obstetrical practices in Africa. Medical sociologists and anthropologists have considered caesarean section as a medicalization of social events. We are not assuming that it is true of false. The transformation of social events into medical indications rises ethical issues in the provision of healthcare in Africa. In this paper, we especially used the case of caesarean section birth to explore the transformation of social events into medical indications in Africa. Caesarean sections by choice interrogates the obstetrical practices. This paper examines the socio-ethical issues in caesarean section in Africa. We considered some underlying factors: medicalization of the society, informed consent, biotechnology, demand inducement, consumer-induced demand and the health market-driven economy. This was desk-based study. A review of secondary data and literatures relative to caesarean section births in Africa were used for discussion. Findings from literatures revealed that a number of considerations have to be taken such as: demand inducement and information asymmetry, defensive and corporate medicine, medical power, consumer induced demand and health market driven economy. The findings informed health regulators on demand and supply sides of caesarean sections.

Keywords: Caesarean Section; Vaginal Delivery; Medicalization; Society; Ethics; Medical Indications; Health; Economy.


1. Introduction

In the last decade in Africa, maternal mortality remains a public health concern. In order to respond obstetricians and reproductive health professionals have put in place a number of health strategies to reduce maternal mortality. Among these strategies, we have emergency obstetric care (EOC). One of the components of EOC is caesarian section (CS). CS has been used worldwide to save the life of pregnant women during deliveries both in Advanced Industrialized Countries (AIC) and Low and Middle Countries (LMIC). Despite the success of CS in AIC compared to LMIC, CS
rises a number controversies. The first controversy is emergency CS versus elective CS. The second controversy is psycho-social, economic, ethical, legal and technological aspects surrounding CS in Africa. Studies have focused more on estimation of CS rate in Africa using Robson’s ten group classification system (Amita R., Sunny J. 2017). But little attention has been paid to socio-ethical issues of CS in Africa. This article was about reflection about CS practices. To which extent could we know about the necessary or unnecessary CS? Which of the CS is ethically or morally acceptable? These questions may have no answers. Based on the inexistence of standards, it may be so difficult to give clear answers. Ethics is a moral debate: what is wrong or what is right in CS? We attempted to answer these questions using Beauchamp’s principles of ethics.

CS is one of the most widely performed surgical procedures in obstetrics worldwide. It was mainly evolved as a live saving procedure for mother and fetus during the difficult delivery. Emergency CS are done under medical indications. Contrary to emergency CS, elective CS are also known ‘on demand’ or ‘requested’. CS on demand is performed without medical/obstetric indications. Elective CS place mothers and babies at risk. (American College of Nurse Midwives, 2003). An author argued that the growing normalization of care givers recommendations and women’s request for CS outside of clear compelling and well-supported medical indications constitute a profound cultural shift. It involves both a loosening of criteria for various medical indications and considerations of surgical births. (Zeidenstein L. 2005). Over the past decades, the unprecedented and steady rise in the rates of CS have led to increased research, debates and concerns among health care professionals, governments, policy-makers, scientists and clinicians (Meeta G., Garg V. 2017; Margo S. et al. 2016; WHO, 2015; Kaur J. et al. 2013)

2. Global Perspectives

Based on the works of (Osonwa O., K., Eku J. E., Eken P. E. 2016), there are wide global variation in the prevalence of CS. The prevalence of CS rates is highest in the Caribbean, Latin America, and Asian Countries which share CS rate of 26% whereas CS rate is low in South Asia and Sub-Saharan Africa. (Stanton and Holtz, 2006). Twenty-five of the twenty nine countries in Africa have a rate of 5% or lower. Countries such as China, South Korea, Brazil, Iran, Chile, Dominican Republic have the highest CS rate ranging from 30-40% (Stanton and Holtz, 2006). As at 2008 rate was 24% in the UK, in Canada, and Ireland; the CS rate was was 26% in 2005-2006 and 26% in 2009 respectively (Bucklin, Hawkins, Anderson, Ullrich, 2005). In the United States of America CS rate varies from 23% to 40%, Campania (60%) as at 2008, Roma (44%) and Australia 31% as at 2007.

In Advanced Industrialized Countries (AIC): such as in US, CS was reported to be the most performed procedure as at 2011 especially for people who were between the age of 18-44 years old. (Pfummer, Wier and Stocks, 2013). In the U.S., CS rate rise considerably to 60% from 1996 to 2009 while in 2010 it felt slightly to 32.8%. CS rate has been reported highest in China at 46% as of 2008 (WHO, 2010). In 2010 WHO Global Survey carried out in 24 countries showed that African Countries recorded an average CS rate of 9% (Lumbiganon et al.2010). Previous studies also indicated that CS rate considerably range from 0.8%-17% in most African countries (Wylie and Mirza 2008; Stanton et al. 2005). A recent study carried out in Cairo University Hospital (CU) and Almatayira Hospital (AMH) indicated that CS rate was at 37.8% and 36.5% respectively.
(Ebrashy et al. 2011). Previous studies carried out in Nigeria indicated CS rate varies from 3% to 21% (Osonwa et al. 2016). In East Africa CS rate varies from 0.6% to 18% (Worjoloh. et al. 2012)

A very recent study carried out in 2016 shows that almost 1 in 5 women in the world now give birth by CS. At present, 40.5% of all births are by CS in Latin America and the Caribbean. Southern America is the sub region with the highest rates of CS in the world with 42.9%. Africa shows the lowest average rate of CS with 7.3%, which is a weighted average between 3.5% in Sub-Saharan Africa and 27.8% in Northern Africa (Betran P. A., Ye J. et al.2016).

3. The African Perspectives

The studies of Betran P. A., Ye J. et al. (2016) showed that except for two countries (Guinea and Nigeria) in which CS rates decreased and one (Zimbabwe) that maintained the same rate, all other countries have increased the use CS at different levels. The absolute and yearly increases are more remarkable in Low and Middle Income Countries (LMIC). At the regional level, Latin America and the Caribbean had the largest absolute increase in CS rates (19.4%) which were above any other region. On the other extreme, Africa had the smallest absolute rise (4.5%) and remained as the region with the lowest CS rates for the last 24 years. In particular, sub-Saharan Africa maintained virtually the same rate while the countries in Northern Africa presented a steeper increase particularly since 2000. Asia witnessed the second largest absolute increase and the largest Average Annual Rate Increase (AARI), although it is still currently the region with the second lowest CS rate in the world (19.2%) after Africa (Betran P. A., Ye J. et al.2016) . The Table 1 indicates the CS rate as per region in Africa.

Table 1: Caesarean section rate in Africa according UN Geographical Grouping in 2014

<table>
<thead>
<tr>
<th>Region</th>
<th>Birth by CS (%)</th>
<th>Range (min. to max%)</th>
<th>Coverage of estimates %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>7.3</td>
<td>1.4-51.8</td>
<td>92.8</td>
</tr>
<tr>
<td>Eastern Africa</td>
<td>3.9</td>
<td>1.5-9.6</td>
<td>96.3</td>
</tr>
<tr>
<td>Middle Africa</td>
<td>5.8</td>
<td>3.8-10.0</td>
<td>83.2</td>
</tr>
<tr>
<td>Northern Africa</td>
<td>27.8</td>
<td>6.6-51.8</td>
<td>97.4</td>
</tr>
<tr>
<td>Southern Africa</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Western Africa</td>
<td>3.0</td>
<td>1.4-11.4</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: UN Geographical Grouping Number of live birth in Africa in 2010
In 2010 Data for South Africa were not available.
The same study indicate the changes in CS in Africa and sub-regions (Table 2)

Table 2: Change in caesarean section rate in Africa according UN Geographical Grouping from 1999 to 2014

<table>
<thead>
<tr>
<th>Region</th>
<th>Change in Cs rate (%)</th>
<th>Absolute Increase (%)</th>
<th>AARI (%) per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>2.9-7.4</td>
<td>4.5</td>
<td>4.0</td>
</tr>
<tr>
<td>Eastern Africa</td>
<td>2.3-3.9</td>
<td>1.6</td>
<td>2.2</td>
</tr>
<tr>
<td>Middle Africa</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Northern Africa</td>
<td>4.5-27.8</td>
<td>23.3</td>
<td>7.9</td>
</tr>
<tr>
<td>Southern Africa</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Western Africa</td>
<td>2.6-3.1</td>
<td>0.5</td>
<td>0.7</td>
</tr>
</tbody>
</table>

Source: UN Geographical Grouping Number of live birth in Africa in 2010
AARI: Average Annual Rate of Increase
No data available for Middle Africa and Southern Africa

The low rates of caesarean delivery in sub-Saharan Africa are presumably a reflection of very low levels of access to caesarean sections, which are themselves associated with extremely poor access to emergency surgical care in general. A recent study in Ghana, Kenya, Rwanda, Uganda and the United Republic of Tanzania revealed massive gaps in the infrastructure for emergency surgical care. Fewer than 50% of the hospitals surveyed had dependable running water and electricity, and only 19-50% of the hospitals provided 24-hour emergency care. Countries in sub-Saharan Africa generally have few skilled workers able to perform surgery – including caesarian sections – and most of their qualified doctors live in urban areas. (Cavallaro F. L., Cresswell J. A. Frana G.V, Victoria CG., Barrow A.J, Ronmans C. 2013) A household’s ability to pay for the surgery is thought to be an important determinant of caesarean deliveries. The cost of emergency caesarean sections can be catastrophic for house-holds. Although user fee exemptions have been one of the key strategies to increase access to delivery. CS rate has yet to be rigorously evaluated. While such fee exemptions may have contributed to the rises seen in caesarean delivery rates in countries such as Ghana and Senegal, such rises cannot be categorically attributed to the exemptions.

Furthermore, a household’s ability to pay for surgery may not be the main barrier to caesarian sections in settings where the necessary health facilities are sparsely distributed. (Cavallaro F. L., Cresswell J. A. Frana G.V, Victoria CG., Barrow A.J, Ronmans C. 2013). Concluding on the rise of CS, previous study revealed a number of factors associated with the rise of CS such as: maternal indications, caesarean delivered on maternal request (CDMR), advanced maternal age, socio-economic status (SES), socio-cultural factors, gender roles, cultural beliefs, religious ideologies and international public health concerns (Byanjankar S. et al. 2017; Gjonej R. et al. 2015; Ugwu Nu, de Kok B 2015).

The previous section was an overview on epidemiological aspect of CS worldwide comprised Africa. The next debate is on socio-ethical issues surrounding CS. The lowest or highest CS rate is not justifying that the mothers and fetus who are undergoing emergency CS procedures or elective CS are not at risk.

4. Objective of the Study

This paper critically examines the socio-ethical issues surrounding the caesarean section birth in Africa despite the lowest CS rate

5. Materials and Methods

This was an ethno-monographic paper using relevant literatures relative to CS. A desk-based study was used to write this paper by consulting data base and secondary data from previous global research and regional studies on CS in Africa.
6. Socio-Ethical Issues

From Beauchamp and Childress’s works on ethics (1994), there are key ethical principles to be followed by health professionals: the principle of autonomy, the principle of beneficence, the principle of non-maleficence, the principle of justice and the principle of fidelity.

7. The principle of Autonomy

The principle of autonomy recognizes the right of individuals to self-determination. This is rooted in society’s respect for individuals’ ability to make informed decisions about personal matters. Autonomy has become more important as social values have shifted to define medical quality in terms of outcomes that are important to the patient rather than medical professionals. The increasing importance of autonomy can be seen as a social reaction to a “paternalistic” tradition within healthcare (Holmes & Purdy 1994). Studies have questioned whether the backlash against historically excessive paternalism in favor of patient autonomy has inhibited the proper use of soft paternalism to the detriment of outcomes for some patients. Respect for autonomy is the basis for informed consent and advance directives. (Haring 1974).

Autonomy is a general indicator of health. Many diseases are characterized by loss of autonomy, in various manners. This makes autonomy an indicator for both personal well-being of the profession. This has implications for the consideration of medical ethics: “is the aim of health care to do good, and benefit from it?”, or “is the aim of healthcare to do good to others, and have them, and society, benefit from this?”. Ethics – by definition – tries to find a beneficial balance between the activities of the Individual and its effects on a collective. By considering autonomy as a gauge parameter for (self) healthcare, the medical and ethical perspective both benefit from the implied reference to health (Monge 1991).

In the case of CS, conflict rises between maternal and fetus life. Consider a maternal refusal of treatment that may benefit the fetus or consider a mother choose an elective CS that may put the life of the fetus in danger: then a variety of ethical framework can support clinical decision making in addition to principle-based approaches. Helpful tools include feminist theory, case-based analysis and ethics of care along with the principle of autonomy. The maternal-fetus conflict can be illustrated when maternal behavior can harm the fetus. Six conflicts may rise when applying the principle of autonomy in regard to CS:

- Benefit to pregnant women and harm to fetus
- Benefit to fetus and harm to pregnant women
- Autonomy and legal consideration
- Autonomy and maternal value
- Autonomy and medical evidence
- Autonomy and social concern

In ethical perspective, this is a dilemma as we have the mother’s rights, the fetus rights and other rights related to maternal-fetus relation (figure 1). In this context, the ethical debate has focused around question of risks and benefits and has evolved questions obstetrical practices in medicine. The principle of autonomy might contribute to the construction of a reproductive rights framework for the women, but what about the fetus? The ethical debate remains.
In most African countries the principle of autonomy remains questionable. CS can be induced by medical profession. This inducement is explained by the information asymmetry between the pregnant woman and the physician. The physician has more knowledge on pregnancy compared to pregnant mother. Physician may influence the women’s decision making in the choice of CS. Research carried out in Nigeria revealed that most women were undergoing less emergency CS than elective CS. Reasons may be attributed to the indication of CS and doctor’s influence in decision making which most time overrides the opinion of the patient. Consequently these factors usually influenced the type of CS to be carried out. On the other hand based on some erroneous and myths beliefs about CS, most women would not subscribe to elective CS. (Osonwa O. K. et al. 2016).

The principle of autonomy may contradict the principle of informed Consent in case of elective CS. In ethics, four general moral principles are applied to particular ethical problems: autonomy, beneficence, non-maleficence and justice. These principles are grounded in Kantian deontology, Mills Utilitarianism, Judeo-Christian morality and the Hippocratic Oath. Autonomy is, basically, the capacity to make and cast on one’s own decision. However, the conception of autonomy that has emerged in bioethics, especially in the matter of informed consent, seems much narrower. (Zeidenstein L. 2005).

The ethical dilemma of elective Cesarean involves confusion about what constitutes informed consent. The informed consent process can be analyzed as containing three elements: information, comprehension, and voluntariness. Of course, the motives for obstetricians are not to do harms to either mother or fetus when they decide that an elective Cesarean is an ethical choice. But in a typically paternalist physician-patient relationship, the physician might present only information on risks and benefits of a procedure that he or she thinks will lead the patient to making the right
(i.e., the physician–supported) decision regarding care. How can we expect the surgically trained obstetrician to present the risks and benefits of natural childbirth? It is rare that medical residents or nursing students participate in a socially supported family birth even once in their training. Female medical residents often choose elective Cesareans for themselves. (Zeidenstein L. 2005).

8. The Principle of Beneficence

The term beneficence refers to actions that promote the wellbeing of others. In the medical context, this means taking actions that serve the best interest of patients. However, uncertainty surrounds the precise definition of which practices do in fact help patients. (Badi & Badi (2009) identified beneficence as one of the core values of health care ethics. Some scholars, such as Pallegrino & Thomasma (1993), argue that healing should be the sole purpose of medicine, and that endeavors like cosmetic surgery, contraception and euthanasia fall beyond its purview as well as elective CS. CS on demand or for non medical indication goes against medical deontology. The obstetrical practice of CS on demand or request interrogates the medical professions.

9. The Principle of Non-Maleficence

The concept of non-maleficence is embodied by the phrase, “first, do no harm” or the Latin ‘primum non nocere’. Many consider that should be the main or primary consideration (hence primum): that it is more important not to harm your patient, than to do them good (Haring 1974). This is partly because enthusiastic practitioners are prone to using treatments that they believe will do good, without first having evaluated them adequately to ensure they do no (or only acceptable levels of) harm. Much harm has been done to patients as results. It is not only more important to do no harm than to do good; it is also important to know how likely it is that your treatment will harm a patient (Monge 1991). So a physician should go further than not prescribing medications they know to be harmful – he or she should not prescribe medications (or otherwise treat the patient) unless she/he knows that the likely to be harmful; or at the very least, that patient understands the risks and benefits, and the likely benefits outweigh the likely risks (Olafson 1967). Once again, uncertainty in obstetrical practices may lead to harm to mother and fetus.

10. The Principle of Fidelity

This principle refers to fairness to patients. Although elective caesarean versus vaginal birth remains a challenge for midwives and obstetricians. Issues of fidelity arise for health professionals when two people voluntarily enter into a client- health professional relationship. Fidelity involves keeping promises; it also involves issues of faithfulness and loyalty. In the case of caesarean delivery on maternal request (CDMR) or emergency CS, the health professionals have to be loyal. In African cultural context, there are a lot of controversies surrounding the concept. What means Loyal? Is the health professional loyal for CDMR or emergency CS? Majority of women are little knowledgeable and might easily be manipulated in the type of CS.

11. The Principle of Justice

The meaning of justice as an ethical principle is said to have originated with Aristotle (Beauchamp & Childress, 1994), who suggested that justice means treating equals equally and but in proportion
to their relative differences. Thus, equal people have the right to be treated equally, and non-equal people have the right to be treated differently if the inequality relevant to the issue in question. For example, politicians may be equal as persons but have differently party affiliations. Should these politicians need medical care, they should be treated equally and fairly. Should they ascribe to office and run for reelection, they may be treated differently by their constituents. In Africa, the demand for elective CS is particular for high income households. Aristotle’s principle of justice might be questionable.

In Africa settings, frequently, the differences in maternal health access are more pronounced in different socioeconomic groups within each country. A number of studies have associated the CS with socio-economic status (SES). The CS is associated with higher familiar income per capital, higher education, lower residential crowding, and pregnancy planning and advanced maternal age. A study carried out in Bangladesh, demonstrated that women from poorer and poorest households reported lower use of CS at around 30% and 54% respectively, whereas the use of CS was 1.32 times and 2.33 time higher among the richer and richest households who generally choose private hospitals where frequency of CS is higher which was similar to the study done in Finland. In Mexico the pregnant women belonging to high socioeconomic level was associated with 44% more chance of cesarean regarding low stratum (OR= 1.44,95% CI: 1.12 -1.83) and women within the high social classes were attended only 1 private hospitals and 85.07% of these women underwent to a CS. (Byanjankar S., Yu B. 2017).

The trend among some studies reviewed shows directly proportional relationship between cesarean section and a higher educational level. In Brazil women with higher maternal educational level (12years), showed a cesarean prevalence of 77.2%. (Byanjankar S., Yu B. 2017). CS is also associated with allocation of resources in health. Why society allocates resources to non medical indications (e.g CDMR)?

12. Deontological Ethics and Caesarean Section

This theory is argued by Fisher & Lovell, (2009), was developed by Kant’s philosophy was that action must be guided by universal principles that apply irrespective of the consequences of the actions. An action can only be morally right if it is carried out as a duty, Kant’s categorical imperative lays emphasis that one does ‘duty for duty’s sake.’ not in expectation of a reward. Medical codes of deontology are built upon Kantian principles, which provided a theory of moral permissibility for interactions that violate formulation of the categorical imperatives are morally impermissible. The patient is not sick and she chooses a medical procedure of her choice putting her life and the life of the baby at risk.

13. Discussion

Medical sociologists and anthropologists examine the interaction between doctors and patients in term of power and shared power in treatment decision-making process. The elective CS illustrates the social construction of disease without non medical indications. The demand and the supply side influence the CS.
The doctor-patient relationship is governed by power. As demonstrated the works of Bourdieu (1977; 1996), medical power is a social professionalism construction. The physician acquires his power through education, trainings, skills, knowledge and social capital. Medical knowledge whether an art or a science, is appropriated by the doctor as a source of professional power. The physicians’ possession and use of medical knowledge constitute their scientific authority; physicians’ power derives from their ability to create objectives, representations, of the patient’s health or illness (Weiss, 1997). Medicalization is also source of medical power. The notion of medicalization has been applied by Foucault in analyzing between state and its population, between power and individual subject. Medicalization describe a process where more and more aspects of human existence, human behavior and human body are reframed as medical issues and where the professional power of medicine expands over wider sphere of life (Foucault, 1975; 1986; 1994; 2000). Medicalization induces biopower. The concept of biopower seems unavoidable in studies of health and illness, not only in the most obvious forms of institutional power or authoritative power as demonstrated in healthcare institution, but also the configuration of power in specific social setting in more subtle form of self discipline as pointed out Foucault. His study of power is not formed as attack on the exercise of power by specific institutions, groups, elites, but rather a study of the techniques or the forms of power as enacted in relations between individual agents and incorporated in each individual (Helle and Vibeke, 2004).

In this context, Friedson’s works (1961, 1970, 1983, 1986) demonstrated that medical profession had extended its monopoly over health and illness both through subordination, exclusion of other health work occupations such as nursing and through control of the process of diagnosis treatment and hospitalization. Medical dominance was achieved through occupational closure and control of the division of labor (Freidson, 1970, 1986). Occupational closure refers to a medical monopoly of the profession.

The physician-patient relationship needs to be redefined to allow both the physician and patient to take an active role in treatment decision. Medical sociologists and anthropologists have conceptualized the physician-patient relationship in variety ways (Parson, 1952).

14. Conclusion

Caesarean section (CS) rate continue to rise in Africa and worldwide. The phenomenon is attributed to many factors such as: caesarean delivery on maternal demand, advanced age, socio-economic status, maternal obesity and CS prevalence in public and private hospitals. The CS rate range is accompanied with socio-ethical concerns: autonomy, beneficence, non-maleficence, fidelity, justice, deontological ethics The elective CS may be conserved as social construction of disease or medicalization of births.

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