

## Do Residents of the Slums of African Capitals Have Access to Cesarean Sections? The Example of Dakar (Senegal)



### Summary

Physical and financial barriers to accessing cesarean section, which affect poor women more, are the main factors explaining high rates of maternal and neonatal mortality in low-income countries. To deal with this situation, several countries in sub-Saharan Africa launched free cesarean section policies in the early 2000s, including Senegal.

In Senegal, little evidence has been produced to understand disparities in access to cesarean section, specifically in the slums of the city of Dakar. This study aims to fill this gap. It first seeks to map the coverage of structures offering cesarean sections in the slums of Dakar and then to analyze the way in which women who live in these areas of poverty benefit from this obstetrical act.

A mixed methodological approach was adopted combining on the one hand a quantitative survey of health facility managers and women who have undergone cesarean section and on the other hand a qualitative survey to collect the perception of women and health providers on the modes of childbirth in general and cesarean section in particular.

The results indicate a relatively positive history of cesarean section in the Dakar region. Women who live in slums do not travel long distances to benefit from a cesarean section and can benefit from Caesarean section when medical emergency requires it. However, the costs of this obstetric procedure remain high despite the free cesarean section policy established in Senegal for more than a decade.

The conclusions of this study make it possible to improve the available knowledge on urban health and in particular on the accessibility of cesarean section to poor women and/or living in the slums of African capitals.

### Introduction

In sub-Saharan Africa, equitable access to cesarean section still represents a major challenge for reducing maternal and neonatal mortality, particularly among disadvantaged populations where nearly 50% of maternal deaths are recorded.

This situation is even more exacerbated in slums, where women experience enormous difficulties in accessing certain health care, including cesarean section. It is in this context that this study is undertaken in Dakar, where 23% of the Senegalese population live.

Its objective is to better understand the socio-spatial inequalities in access to cesarean section among women living in the slums of Dakar. This involves, specifically:

- Determining the geographic accessibility of health facilities that offer cesarean sections in Dakar compared to slums
- Analyzing the financial accessibility of cesarean sections
- Explore the perceptions and experiences of cesarean section of women in the slums of Dakar
- Study the practices and experiences of cesarean section among health personnel in public and private health establishments in Dakar.

### Methods

A mixed methodological approach was used combining a quantitative component and a qualitative component. A geo-spatial analysis was also carried out.

Quantitative data were collected on the one hand, from 18 health establishments, including 12 public and 6 private (fig. 1), in order to assess their capacity to offer cesarean section and, on the other hand, from 260 women who live in slums and who underwent a cesarean section between July and December 2022.

Alongside this quantitative survey, qualitative interviews were carried out with 53 people including health personnel and pregnant or postpartum women with or without a history of cesarean section.

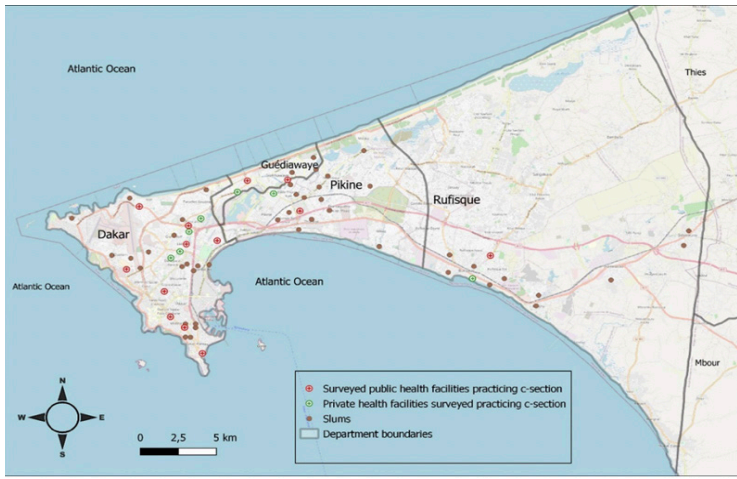


Figure 1: Distribution of public and private health structures surveyed (source: authors)

### Physical Accessibility to Cesarean Section

The level of medical service according to the distribution of slums highlights a very high ratio of concentration of health structures around poor precarious housing areas explaining good geographical accessibility. Nearly 75% of slums are located less than 2 km from a health facility offering cesarean section (fig.2). This is also why the majority of women surveyed (76%) were located less than 1 hour from the health facility where they received the cesarean section. Among them, 24% live less than 15 minutes, 34% less than 30 minutes and 18% less than 45 minutes from a structure. Only 14% of them are located more than an hour from a facility that performs cesarean sections (fig. 3A).

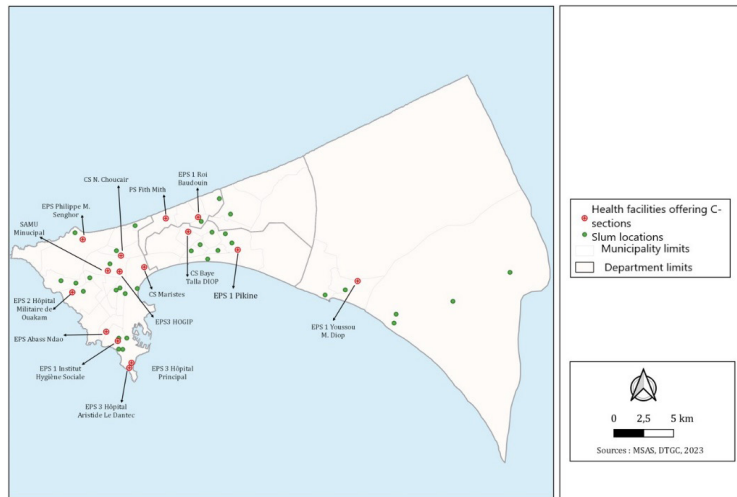


Figure 2: Spatial distribution of health facilities that offer cesarean section and slums

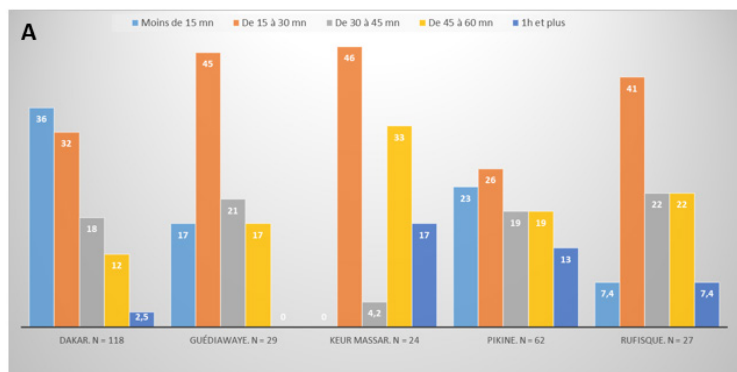
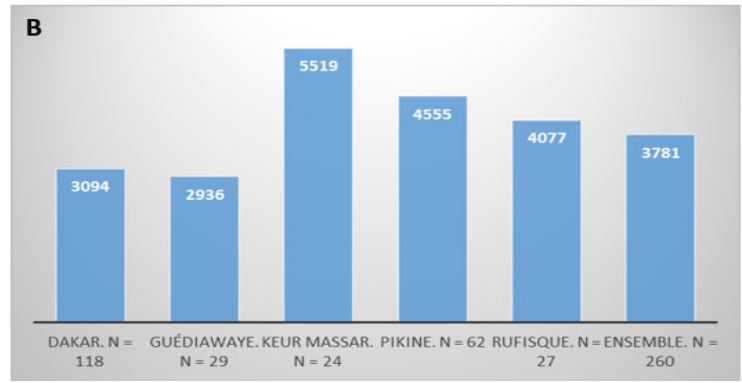


Figure 3: (A) Time to access a health facility



(B) Average cost of transport to the health facility

### Financial Accessibility

The cost of cesarean section is one of the main determinants of access to this obstetric service. 50% of the heads of the health facilities surveyed stated that cesarean section was completely free in their structures compared to 33% who believed that it was chargeable. In 17% of health facilities, cesarean section is free but the patient must purchase a cesarean section kit.

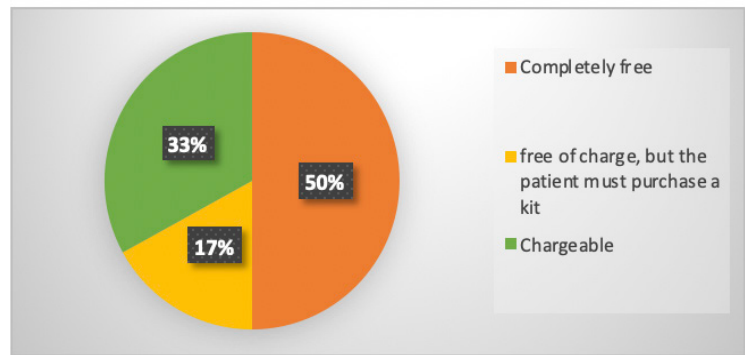


Figure 3: Cost of caesarean section in surveyed health facilities

However, surveys of women who have undergone cesarean section in these health facilities have revealed that the free cesarean section hides associated costs borne by patients. These include, among other things, the consultation ticket, prescriptions and the cost of hospitalization.

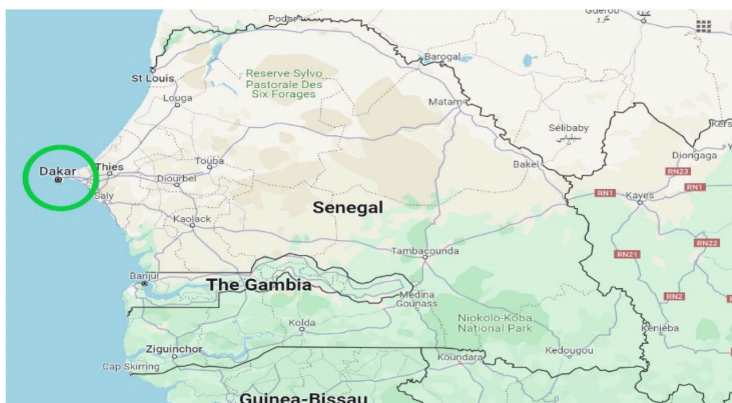
The average cost of cesarean section varies considerably depending on the types of health facilities. It is lower at the level of health centers (65 000 FCFA) and district hospitals (95 833 FCFA) compared to national hospitals (191 250 FCFA). On the other hand, at the level of private clinics, the cost of cesarean section is very high (on average 630 000 FCA).

According to 73% of respondents, the cost of cesarean section is high, compared to only 3% who think it is low. Often women use different sources to pay these costs. The woman and her husband contribute, in most cases, 95% of the payment of this cost, or they can borrow from their loved ones (20%) and/or benefit from a donation from a third party (7.7%), and/or the payment of their health insurance (7.7%) and/or the hospital (5.1%). Some women (1.6%) sell their belongings to supplement the payment of costs related to the cesarean section.

## Perceptions of Cesarean Section among Women

The analysis of women's perceptions highlights their preference for vaginal delivery, which according to them makes it possible to reduce postpartum complications and to have other children in the future. Caesarean section is described by the respondents as being a means of saving the life of the mother and child, however the after-effects and post-operative handicaps, the risks of medical errors, the limitation and spacing of births that it can cause women who have never practiced it to express a certain distrust of it. This distrust is fueled, on the one hand by the speeches of those who have had a painful experience of cesarean section, and on the other hand by popular beliefs not verified by science.

This demonstrates the need to raise awareness to help women better understand cesarean section. This makes it easier for nursing staff to be able to perform the procedure when a medical emergency is necessary, without encountering reluctance from women or their families.



Location of Dakar, Senegal

## What to Do

The study's recommendations are mainly focused on:

- » The need to evaluate the free cesarean section policy in Dakar to understand the reasons why the targets do not take full advantage of it;
- » Improving the technical platform and increasing the reception capacities of obstetric services in public hospitals;
- » Improving communication between health personnel and women during prenatal consultations to facilitate their involvement in the choice of their mode of delivery.

## Contributors

El Hadji Malick Sylla, Ndèye Awa Fall, Fadima Yaya Bocoum, Arsène Brunelle Sandie, Diarra Bousso Senghor, Barrel Sow Gueye, Ibrahima Sy, Birane Cissé



Guinaw Rail, Dakar slum

## About Countdown to 2030 Project

Countdown to 2030 for Women's, Children's and Adolescents' Health (CD2030) focuses on tracking service coverage, inequalities and health systems for reproductive, maternal, newborn, child and adolescent health and nutrition (RMNCAH+N) globally, regionally and at country level. The Countdown to 2030—is a unique global collaboration of academic institutions, UN agencies, World Bank and civil societies to work with countries and strengthen the country capacity for data analysis and use.

Over time, CD2030 has evolved from a primarily global monitoring collaboration of academics, UN agencies and civil society to a country-focused network of global, regional, and country institutions and individuals. The aim is to maximize country evidence and capacity to analyze, interpret, and use empirical data, ranging from surveys to health facility and system data, to track coverage levels, trends, and inequalities. As such, CD2030 contributes to improving the survival and health of women, children, and adolescents with a focus on disadvantaged populations in low- and lower-middle income countries.

Originally known as Countdown to 2015, the Countdown Initiative started in 2003, in response to the challenge of monitoring the maternal and child health-related Millennium Development Goals by 2015. At the end of the MDG era, the Countdown to 2030 started in 2016 with an initial phase (2016 – 2019), when the Initiative adapted its strategies and approaches to align with the Sustainable Development Goals (SDGs) and particularly the Global Strategy for Women's Children's and Adolescents' Health 2016-2030.

In the second phase (2020 – 2022), CD2030 expanded its work to collaborate with public health institutions in 15 countries through a partnership with the Global Financing Facility (GFF). During that period, the project implemented the Exemplars in Global Health (Maternal and Child Health component) research studies to document the positive outliers that are associated with declines in maternal and new born mortality during the period 2000-2017 in 8 countries.

The project aims to achieve the following outcomes:

- » Improved country-led data analysis and monitoring
- » Increased innovation and evidence through multi-country collaboration
- » Improved global monitoring and measurement
- » Improved communications for policies, programs and accountability