

2018

# Sierra Leone: Maternal and Infant Mortality

Mackenzie Ryan

*Augustana College, Rock Island Illinois*

Follow this and additional works at: <https://digitalcommons.augustana.edu/pubh100global>



Part of the [Public Health Commons](#)

---

## Augustana Digital Commons Citation

Ryan, Mackenzie. "Sierra Leone: Maternal and Infant Mortality" (2018). *Global Public Health*.

<https://digitalcommons.augustana.edu/pubh100global/75>

This Report is brought to you for free and open access by the Public Health at Augustana Digital Commons. It has been accepted for inclusion in Global Public Health by an authorized administrator of Augustana Digital Commons. For more information, please contact [digitalcommons@augustana.edu](mailto:digitalcommons@augustana.edu).

# Sierra Leone: Maternal and Infant Mortality

## Overview

Sierra Leone is a country located on the western coast of Africa, situated between Liberia and Guinea. The two primary ethnicities in Sierra Leone are Temne and Mende. The population is primarily centered in the southern and western portions of the country. Sierra Leone is currently characterized by a large population growth (the fertility rate is 5 children per woman and the population growth rate is 2.38 percent) and currently is home to 6,163,195 persons. In terms of religion, the country is largely Muslim followed by indigenous religious beliefs. The government is characterized as a presidential republic where the president is elected by popular vote for a 5 year term. This president then elects a cabinet for himself that must be approved by Parliament. There is also a Supreme Court system. Major challenges currently faced by Sierra Leone include lack of adequate healthcare resources, high unemployment rates, and high maternal and infant mortality (CIA, 2017a).

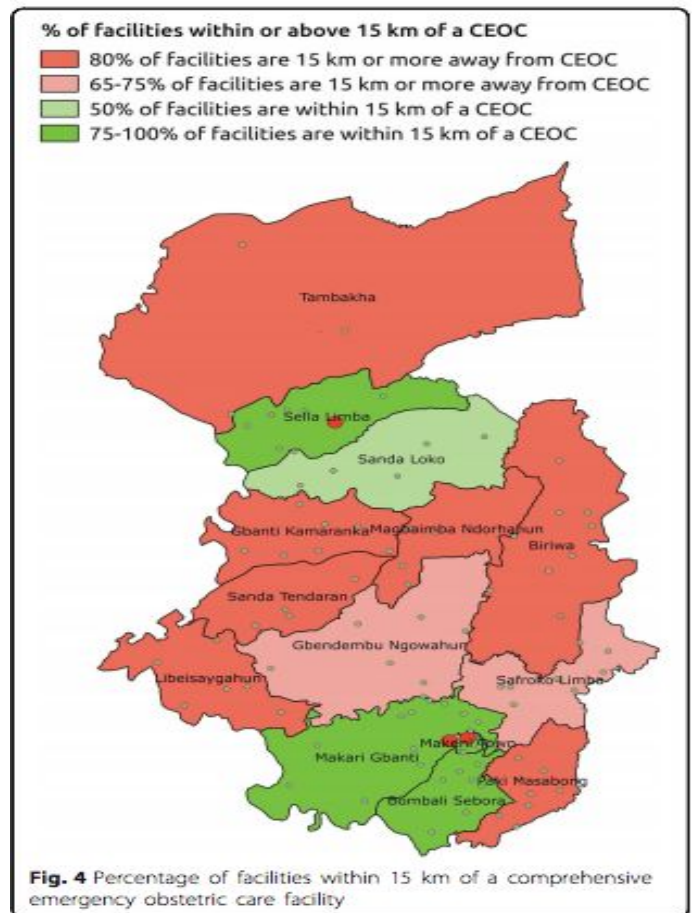
## Infant and Maternal Mortality

One of the major problems that Sierra Leone faces is maternal and infant mortality. Infant mortality is defined as “the number of deaths of live-born infants occurring in the first year of life per 1,000 live births” (Turnock, 2016). According to the World Health Organization, maternal mortality is the number of deaths per 100,000 live births. They define maternal death as “the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes” (WHO, 2018). The infant mortality rate in Sierra Leone in 2015 was 87.1 infant deaths per 1,000 births and the maternal mortality rate was 1360 maternal deaths per 100,000 births (WHO, 2017). In comparison, the United States has an infant mortality rate of 5.8 infant deaths per 1,000 births and a maternal mortality rate of 14 deaths per 100,000 births (CIA, 2017b).

## Risks and Outcomes

The population most at risk for infant and maternal deaths include pregnant women, women who have just delivered, and infants. Rather than the risk being based on race or ethnicity, the risk is correlated with lower social status and geographically isolated areas.

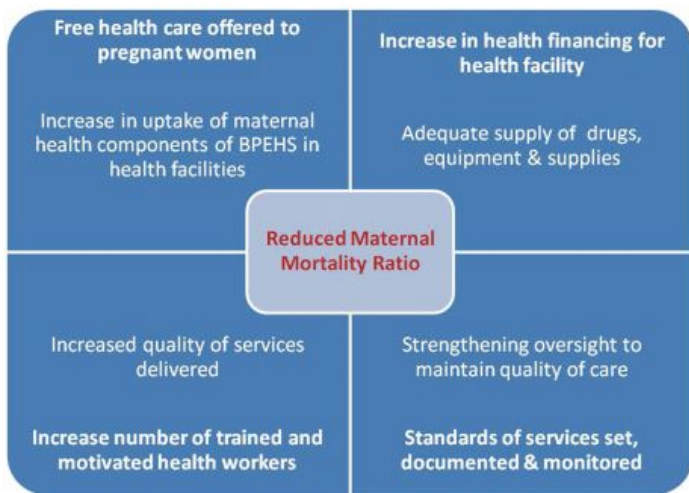
Geographically, mothers in northern Sierra Leone are more isolated from health services than mothers in other areas of the country. The figure below demonstrates how close health care facilities in Northern Sierra Leone are to emergency delivery centers (Koroma et al., 2017). Maternal health is important to birthing outcomes, as poor maternal health can lead to birthing complications, poor infantile health, and poor maternal recovery after the birthing process.



(Koroma et al., 2017)

## Current Interventions and Challenges

According to the World Health Organization, a Free Health Care Initiative was activated in Sierra Leone in 2010 in order to allow treatment and services for pregnant women (WHO, 2017). This initiative “exempt[s] pregnant women, breastfeeding mothers and children under 5 years of age from paying fees for services” (Koroma et al., 2017). The figure below demonstrates the goals of this health care program. However, this initiative has not been entirely effective for multiple reasons. One is that although more women



(Koroma et al., 2017)

are utilizing these services, the services are not of a high quality. A survey conducted by Koroma et al. demonstrated that the exams performed by health care providers in health care clinics were not sufficient for a pregnant woman, nor were the tests and counseling. Many of these clinics also lack proper delivery rooms or equipment for emergency procedures (Koroma et al., 2017). Another reason that this initiative has not been successful is the funds that had to be re-allocated to the Ebola efforts in 2014 (WHO, 2017). Another challenge are the providers utilized in the healthcare facilities. For example, many areas employ Trained Birthing Attendants (TBAs). While TBAs train with either physicians or midwives, they are not sufficiently trained to care for a mother or infant if there is a complication with the birthing process (Kanu, Tang, & Liu, 2014). Another study aimed to determine if changing the roles of TBAs to more of a public health role (such as education and referral to higher level health care facilities) would improve maternal health. At the time of the study the TBAs that received this educational training had positive thoughts of their new roles and they were well received by other health care staff and by pregnant women (Orya et al., 2017). The final, and quite possibly the largest, challenge faced in relation to infant and maternal mortality in Sierra Leone is the education women have about maternal and child health. For example, a study conducted by Kanu, Tang, and Liu in 2014 demonstrated that 63.5 percent of mothers surveyed did not know the signs of a dangerous birth that would require delivery in a hospital setting, only 19.1 percent of mothers surveyed could prepare an oral rehydration solution for a dehydrated child, and 32.8 percent of mothers could not identify signs of pneumonia.

## Addressing the problem/Creating a Solution

I think that the current intervention methods are appropriate but need to be expanded upon. For example, further health care facilities need to be established in Northern Sierra Leone in order to avoid this geographic isolation. As Trained Birthing Assistants have not been shown to decrease maternal and infant mortality when they are the ones delivering the child, their roles should all be changed to educating mothers. These birthing assistants could then do home visits and home education in order to decrease travel expenses and time constraints for pregnant women. Although the free healthcare initiative is working to allow these women more access to prenatal services, it does not do much good if the services provided are not adequate or sufficient. Continued education for the healthcare providers as well as post-delivery TBA visits may also decrease maternal and infant mortality rates.

Central Intelligence Agency [CIA]. (2017). The world factbook: Sierra Leone. Retrieved from <https://www.cia.gov/library/publications/the-world-factbook/geos/sl.html>

Central Intelligence Agency [CIA]. (2017). The world factbook: United States of America. <https://www.cia.gov/library/publications/the-world-factbook/geos/us.html>

Orya E., Adaji S., Pyone T., Wurie H., Van den Broek N., & Theobald S. (2017). Strengthening close to community provision of maternal health services in fragile settings: An exploration of the changing roles of TBAs in sierra leone and somaliland. *BMC Health Services Research*, 17 doi:10.1186/s12913-017-2400-3

Kanu, J. S., Tang, Y., & Liu, Y. (2014). Assessment on the knowledge and reported practices of women on maternal and child health in rural sierra leone: A cross-sectional survey. *PLoS ONE*, 9(8), 1-13. doi:10.1371/journal.pone.0105936

Koroma, Kamara, Bangura, Kamara, Lokossou, & Keita. (2017). The quality of free antenatal and delivery services in northern sierra leone. *Health Research Policy and Systems*, 15, 13-20. doi:10.1186/s12961-017-0218-4

Turnock, B. J. (2016). *Public health: What it is and how it works* (6. ed. ed.). Burlington, MA: Jones & Bartlett Learning.