

How skilled are skilled birth attendants around the world?



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Abstract

Despite medical improvements, hundreds of thousands of women and millions of newborns die each year from childbirth-related complications. The United Nations has set goals to reduce the number of these deaths by the year 2030. The chances of survival go up when skilled medical helpers are there to assist with pregnancy and childbirth care, but what does it mean to be “skilled”? We decided to review

the scientific literature to see if there was a clear definition of a *skilled birth attendant* (SBA) in low-and-middle-income countries. We discovered that there are a lot of differences between and within countries on the definition of skilled birth attendants, including requirements for education and training and the tasks they are qualified or able to perform.

Introduction

Even though women have been giving birth for thousands of years, it can still be very risky. In 2017, approximately 295,000 women died from pregnancy or childbirth-related complications, and over 2.5 million newborns died in 2018 alone. The World Health Organization (WHO) identified the presence of a trained medical helper (also known as a “skilled birth attendant” or SBA) at birth as an important factor in improving the health and survival of women and newborns. However, how exactly would you define “skilled”? We suspected that there wasn’t a uniform understanding of what skills and responsibilities the job of an SBA entailed. Without a common standard definition, it would be much harder to assess the role SBAs really play in helping mothers and newborns survive, and even harder to make sure these birth attendants get the education, training, and supervision that they need to perform quality pregnancy and childbirth care. We decided to do a scientific *literature review* to identify the health personnel who were considered as skilled birth attendants in low-and-middle-income countries between 2000 and 2015.



Figure 1:
Mother with healthy twins after delivery in a health facility with skilled birth attendants.

Source: World Health Organization
<https://www.afro.who.int/news/united-nations-country-team-safer-motherhood-zimbabwe>

Methods

We started by looking at all the scientific papers published between 2000 and 2015 that mentioned SBAs in low-and-middle-income countries. Specifically, we focused on the following questions:

- Who were the skilled birth attendants mentioned in the study?
- What kind of education and training were they required to have to attend births?
- Which professional organization *accredited* or regulated them, if any?
- What skills were they able to perform?

Results

Our literature review revealed that there was a lot of variation in what countries considered “skilled birth attendants” (Fig. 2).

- SBAs mentioned in the studies ranged from doctors (16%) to nurses (16%) to midwives (15%) or assistant nurse/midwives (4%). That still left about 40% for other job titles, which made them very hard to compare. In fact, among a total of 341 SBAs, we found over 100 different job titles for them.
- The majority (61%) of these SBAs were reported as “skilled,” but the studies lacked information on roughly a third of them.

Discussion

Our literature review found that the definition of a “skilled birth attendant” is not consistently defined, even though the WHO tried to officially define it in 2014 and again in 2018. The job titles in over two-thirds of the articles did not fit this standard definition of SBA as it was defined in 2014. The lack of a clear definition of the job and its requirements, such as expected education level and training, makes it difficult to compare SBAs between countries.

Standardization is needed to allow studies from different countries to be compared and to gather useful data on SBAs in order to monitor and evaluate their impact on the survival of mothers and newborns. It is important for the definition of skilled birth attendant to be clear to provide a better outline of the requirements to be a qualified SBA,

- Was there any legislation or oversight related to their work?
- Where did they work? In hospitals or health centers, cities or villages?

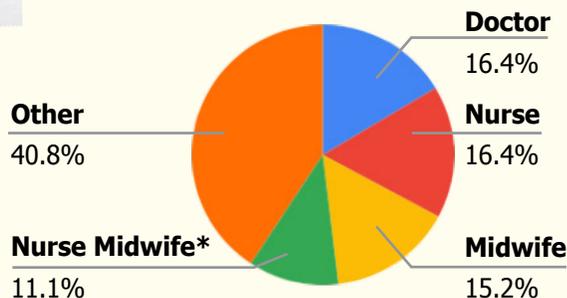
Our search resulted in over 23,000 articles. We then excluded any publications that were duplicates or that lacked information on our key questions. From these, 70 studies from 36 different countries contained the information we needed. Over half (56%) of the studies were on SBA from sub-Saharan Africa, 27% from Central Asia and Southern Asia and 7% from Latin America and the Caribbean.

- Less than 25% of the articles reported that education and training were required for SBAs. When present, training requirements varied widely. Some countries required as little as 3 months of training while others required as much as 10 years.
- Less than 40% of the articles reported if SBAs could perform basic emergency care during childbirth. Of those that did, only 18% could perform all seven skills called *signal functions*.

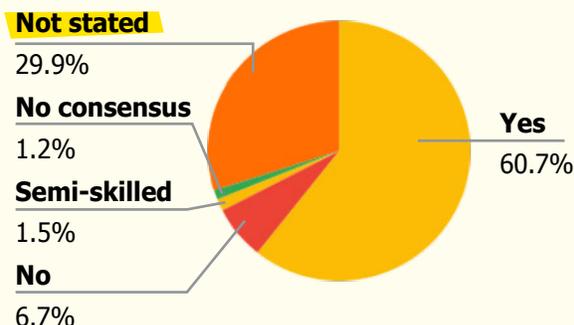
**Please see
Figure 2 on Page 3**

ensuring that high quality of care is received. Large-scale national evaluations of birth attendants and standardized education, training, and accreditation programs are also needed to better evaluate the global landscape of SBAs. The studies reporting on evaluation of SBAs also need to be standardized and high quality. SBAs should not be identified by job title only, but instead by a combination of the skills and competencies they possess and that are required to care for women and newborns during pregnancy and delivery. More detailed information (such as that relating to our literature review questions) is necessary in national data reports. These changes will help provide information that can be compared and provide meaningful insights.

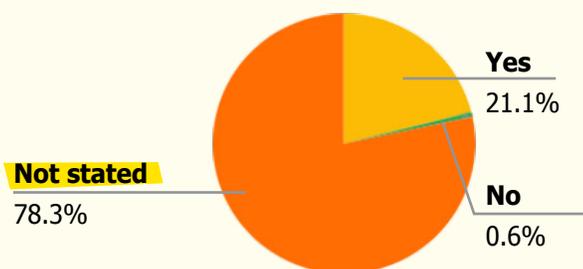
TYPE OF ATTENDANT



CONSIDERED SKILLED?



ENTRY EDUCATION REQUIRED?



YEARS OF EDUCATION RECEIVED

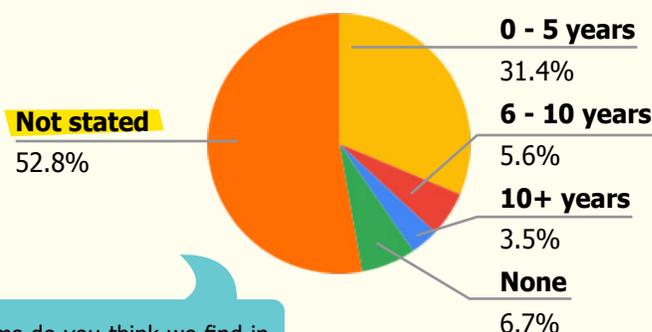


Figure 2:

Characteristics of Skilled Birth Attendants (SBA). Information about 341 people in total.

* 'Nurse Midwife' includes 'Assistant or Auxiliary Nurse/Midwife' and 'Nurse-Midwife'

What problems do you think we find in our study with the reporting on SBAs?

Conclusion

Having a skilled medical helper or attendant at birth may seem commonplace, but it is far from routine in many parts of the world. And because pregnancy and childbirth are risky, especially in the developing world, having someone skilled and trained available to help can drastically improve the chances of survival for both mother and newborn. We need to work harder to make sure these helpers are as skilled as possible

by better defining and accrediting these important jobs. We also need more high-quality studies and national evaluations to help us gather accurate and comparable information about skilled birth attendants. With good information, we can better plan for the future development of maternal and newborn health programs and ultimately improve the health and wellbeing of mothers and newborns globally.

Glossary of Key Terms

Accredit – to certify a school, college, or training program as meeting all formal official requirements.

Literature review – a type of scientific study where scientists review and compare scientific articles for a topic over a defined period of time. In this case, maternal health improvements due to the presence of an SBA, published between 2000 and 2015.

Signal functions – major interventions to avoid maternal and infant death during childbirth such as giving medications or newborn resuscitation.

Skilled birth attendant (SBA) – in 2004 and 2018 the World Health Organization defined it as “a midwife, doctor, or nurse who has been educated and trained to proficiency in the skills needed to manage normal (uncomplicated) pregnancies, childbirth, and the immediate postnatal period, and in the identification, management and referral of complications in women and newborns.”

Check your understanding

1 What is a skilled birth attendant (SBA)?

2 Why are SBAs being used as indicators for maternal health?

3 How is using this indicator currently problematic, as our literature review showed?

4 How can the situation be improved?

5 What do you think it means to "standardize studies"?

REFERENCES

Amy. J. Hobbs, Ann-Beth Moller, Alisa Kachikis, Liliana Carvajal-Aguirre, Lale Say, Doris Chou (2019). Scoping review to identify and map the health personnel considered skilled birth attendants in low-and-middle-income countries from 2000-2015. *PLoS ONE*. <https://doi.org/10.1371/journal.pone.0211576>

The Guardian: Why do women still die giving birth? <https://www.theguardian.com/global-development/2018/sep/24/why-do-women-still-die-giving-birth>

WHO: Skilled Birth Attendants <https://www.who.int/reproductivehealth/publications/statement-competent-mnh-professionals/en/>