



## Readiness for Essential Care of the Small Baby Practice in Rwanda: An exploratory study



Geralyn Sue Prullage, DNP, APN, NNP/PNP-BC Dr<sup>a,\*</sup>, Victoria L. Baker, PhD, MS, MSPH Dr<sup>b</sup>

<sup>a</sup> Midwest NeoPed Associates, LTD, Chicago, IL, United States

<sup>b</sup> Frontier Nursing University, United States

### ARTICLE INFO

#### Keywords:

Neonate  
Small baby  
Essential Care of Small Baby  
Neonatal care  
Rwanda  
Health centers  
Midwives  
Nurses

### Introduction

This exploratory study addressed the Essential Care of the Small Baby program (ECSB). The study identified physical assets and barriers, as well as those of personnel, in caring for the small-well baby down to 1.5 kg in health centers in Rwanda. The second purpose was to establish if a larger-scale study would be needed prior to implementation of Essential Care of the Small Baby program (ECSB) in Rwanda.

The WHO, as well as other countries, including Rwanda, have committed to decreasing neonatal mortality and agreed to the sustainable development goals (SDG) specifically goal 3.2. The SDG 3.2 states that neonatal mortality should be at or less than 12 deaths per 1000 live births by 2030 (WHO, 2015). In Rwanda, 44% of the infant and child mortality falls in the neonatal period (Healthy Newborn Network, 2015), defined as the number of babies dying before Day 28 of life per 1000 live births (World Bank, 2015). Globally from 1990 to 2015, the Rwanda neonatal mortality rate has decreased dramatically from 36/1000 to 19/1000 which is a 47% drop (WHO, 2015). The most common cause of death for the small baby in Rwanda is related to preterm birth complications (28%), intrapartum related (27%), sepsis, meningitis, tetanus (19%), congenital anomalies (15%), pneumonia (6%) and other (6%) (Healthy Newborn Network, 2015).

The Rwanda health center has a multitiered system, from the small dispensaries, health posts, health centers (where many deliveries are performed), district hospitals (where many neonatal units are located),

provincial and finally referral hospitals, where higher level of neonatal care can be obtained (Republic of Rwanda, 2017). Currently, the Rwandan Neonatal Guidelines recommend that babies less than or equal to 2 kg be transferred from the delivery health center to the closest neonatal unit, which is often hours away (RMoH, 2014). In Rwanda, 60–80% of all babies are born in health centers, where approximately 10% of these babies are small babies necessitating transfer (Healthy Newborn Network, 2015).

Essential Newborn Care (ENC) and Helping Babies Breathe (HBB) are among the effective interventions recommended by the World Health Organization (WHO) to combat the trend of increasing neonatal death (WHO, 2015). Out of 139 million babies were born worldwide, 10 million needed help breathing by receiving stimulation and drying, six million needed bag and mask ventilation and one million needed advanced neonatal resuscitation (Wall et al., 2009). HBB was designed to train staff in neonatal resuscitation in an attempt to decrease the complications associated with a baby in distress (Kak et al., 2015). As HBB was taught all over the world, it became evident that small well babies down to 1.5 kg were being born not only in hospitals, but also in health centers. With this knowledge, the American Academy of Pediatrics (AAP) and other international organizations came together to develop a post resuscitation and continued care program, Essential Care of the Small Baby (ECSB), which was developed with similar principles as the WHO's Essential Newborn Care Course (ENCC) (WHO, 2010) and guides the care of small well babies down to 1.5 kg at health centers (AAP, 2015). The Rwandan government has

\* Corresponding author.

E-mail addresses: [sue.prullage@gmail.com](mailto:sue.prullage@gmail.com) (G.S. Prullage), [Victoria.Baker@frontier.edu](mailto:Victoria.Baker@frontier.edu) (V.L. Baker).

accepted and provides training of Helping Babies Breathe (HBB) and Essential Care of Every Baby (ECEB) in health centers. If the Rwandan government accepts that ECSB should be taught in Rwanda the next step would be to train the health center staff. Although the program is developed on evidence based practices, the efficiency and acceptance of the program has not been well studied.

The components of ECSB include:

- how to resuscitate a baby based on HBB principles;
- assessment for danger signs (breathing problems, low temperature, inadequate feedings, signs of infection);
- how to classify and assess a baby based on presentation and vital signs;
- what and how often to use vital signs;
- how to treat a baby with danger signs associated with infection and/or convulsions;
- how to do skin to skin or Kangaroo Mother Care (KMC), use an incubator or radiant warmer;
- how to support breastfeeding, give cup feeding and provide nasogastric tube (NGT) feeds;
- what equipment is needed for assessment and care of the small baby (ambu bags, thermometers, stethoscopes, incubator, antibiotics, anticonvulsants)
- to prevent infection by handwashing (AAP, 2015)

If Rwanda adopts ECSB and small well babies are kept at health centers, this will be a shift for the midwives and nurses. This shift may necessitate a new learning perspective about the assessment and classification for danger signs in the small-well baby. This survey was undertaken as an initial identification of concrete assets and barriers prior to implementation of ECSB in Rwanda. It was expected that some identified gaps would need to be addressed before successful implementation of the ECSB in Rwanda.

## Methods

### Survey content

Quantitative and qualitative data was collected from midwives and nurses assessing themselves in terms of comfort levels, experience, and education. In addition, midwives and nurses were asked to assess the quality of assets at their sites to support them in caring for small babies.

‘Comfort’ was defined by Haavardsholm & Naden (2009, p. 486) as ‘that I feel comfortable in a situation.’ Using this definition, participants used a Likert scale (Washington University, 2017) to quantify their level of comfort with caring for small babies and with procedures related to that care.

The surveys also assessed levels of experience, using Benner (1984)’s approach. Respondents reported the number of years of their experience in caring for small babies and in carrying out procedures related to the ECSB. Benner first pointed out that more ‘experience’ does not always lead to ‘expertise’ and introduced the idea that time spent caring for patients does not provide sufficient experience. For example, Aiken et al., (2003) assessed the influence of average experience among nurses on surgical patient mortality in 168 hospitals. They found that the mean experience level was not a significant predictor of mortality. For experience to lead to expertise, nurses must also practice and reflect of their practice, which allows for preconceived notions and expectations to be confirmed, refined or disconfirmed with real life situations. Just encountering an occasional premature baby is not experience.

Respondents also reported their level of education. Similarly to experience, the literature indicates that education alone does not lead to improved expertise levels. Classroom study without hands on experience has not been shown to improve quality of care for patients

(Benner, 2004). In Rwanda, an advanced neonatal care course was added to the bachelor’s of science program in 2014. Prior to 2014 the midwives and nurses working in health centers or hospital did not have any additional training in neonatal care. It was hypothesised that the lack of education and experience would interact in different ways with different individuals in affecting affect the comfort levels of the midwives and nurses.

### Survey design

This is a survey based on the central components of ECSB (AAP, 2015, Appendix 1). Face validity was obtained by administering the survey to a team of midwifery nursing students at the University of Rwanda. Each of the students surveyed were working midwives and nurses who were returning to university to obtain their bachelors of science in nursing. The students worked in a variety of settings such as health centers, neonatal units and educators. The wording was corrected to contextualise it for Rwanda, based on the responses of the students. Content validity was reviewed by one of the developers of the ECSB program. External validity was maintained by not discussing components of the survey with the staff of the hospital or health center prior to distribution.

### Study design

This was a descriptive exploratory study of assets, barriers and comfort levels of staff in the hospital and health centers in preparation for implementation of ECSB. Assets, barriers and comfort were assessed using a single survey of midwives and nurses with both 5-point Likert type scale and open ended questions. The final part of the survey was to ask open-ended questions assessed participant-perceived barriers and needs in caring for a small baby. The Likert-type scale questions included: very uncomfortable, uncomfortable, neutral, comfortable, or very comfortable. The same scale was utilised for the different questions, followed by the option for the participant to describe why they were very uncomfortable or uncomfortable.

The open-ended questions asked the participants to describe in their own words what barrier they felt in caring for the small baby, and what they needed to care for the small babies. Answers were categorised in by identifying common key words and then placing them together into themes for the hospital and health centers individually.

### Setting

The institutional review board (IRB) approved this study at both Frontier Nursing University and Kibogora Hospital. The survey was conducted from January to February 2016 in the Kibogora catchment which serviced approximately 250,000 people in the southwest province of Rwanda, Nyamasheshe district. Kibogora hospital and its 13 associated health centers participated in the survey. Within the hospital, the neonatal service, delivery service and pediatric division were assessed. Prior to administration of the survey, the investigator met with the director of the health center and hospital unit to obtain the days and times to administer the survey. The midwives and nurses were asked to participate and given as much time as they needed to complete the survey. In 2010, English became the official language of the government, but many of the nurses were most comfortable speaking French. Therefore, an English and French speaking interpreter was hired to be present whenever the survey was administered. He was present to answer any questions that the participants had. The interpreter was a graduate nursing student and was instructed in protocol, ethical issues, and medical terms prior to the day of administration.

Download English Version:

<https://daneshyari.com/en/article/7524219>

Download Persian Version:

<https://daneshyari.com/article/7524219>

[Daneshyari.com](https://daneshyari.com)