



**Challenges Faced by Nurses while Caring for Preterm Babies in
the Newborn Unit at Kisii Teaching and Referral Hospital**

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ISSN: 2706-6606

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How to cite this article: Mochama, R., S., Kereri, D., & Sanga, P. (2020). Challenges Faced by Nurses while Caring for Preterm Babies in the Newborn Unit at Kisii Teaching and Referral Hospital. *Journal of Medicine, Nursing & Public Health*, 3(1), 40-47.

Abstract

Preterm birth is a global problem with the greatest burden experienced in sub-Saharan Africa and South Asia. In Kenya, 193,000 babies are born too soon each year and 9,670 children under five die due to direct preterm complications. Nurses experience numerous challenges as they give care to preterm babies. The aim of the study was to describe the challenges faced by nurses while giving care to preterm babies during the neonatal period in Kisii Teaching and Referral Hospital (KTRH). A cross sectional descriptive study was conducted in the newborn unit of KTRH between April and May 2015. Fifteen nurses were consented to participate in the study through census sampling method. Data was collected using an interview schedule guide. Data was analyzed as themes as they emerged. The challenges encountered include inadequate equipment, supplies and drugs, shortage of staff and lack of an isolation room. Main challenges encountered included lack of equipment and supplies, drugs and inadequate health care providers. There is also need to improve equipment, supply and increase number of health care providers.

Keywords: *Challenges, Nurses, Preterm babies, Newborn unit, Kisii, Referral hospital.*

Background of the Study

Preterm birth is a global problem with the greatest burden experienced in sub-Saharan Africa and South Asia. In Kenya, 193,000 babies are born too soon each year and 9,670 children under five die due to direct preterm complications (UNEP.IRD, 2012). There is good evidence that interventions in the postnatal period, such as Kangaroo Mother Care (KMC), immediate and exclusive breast feeding, hygienic cord care and early detection and treatment of suspected infections can improve early mortality outcomes (Koenraads, Phuka, Maleta, Theobald, & Gladstone, 2017)

Nurses working in neonatal care unit go through various challenges as they give care to preterm babies. A study done in Malawi found that health workers faced several challenges as they gave care to preterm babies and they included; inability of the mothers to follow counseling done on evidence based practices, lack of resources and no discharge protocol and lack of community follow up (Koenraads et al., 2017). A study done in Uganda found that facilities faced challenges in providing care to the newborn and this included; lack of space, equipment and drugs, staff were not trained in preterm care, lack of protocols and guidelines and not using evidence based practices (Waiswa, Kallander, Peterson, Tomson, & Pariyo, 2010). This is similar to a study done in Kenya by Opondo et al., 2009 found that in eight facilities surveyed lacked sufficient staff and were poorly organized, lacked key equipment, laboratory tests, drugs and consumables and management guidelines.

Methods

The study was carried out in Kisii Teaching and Referral Hospital, which is a county referral hospital located in South Western Kenya and is served by 32 community health units, 84 dispensaries, 28 health centers and 14 hospitals (Waithera, Muhia, & Songole, 2017). It has in patient bed capacity of 454 (Ogamba E., 2014), 200 daily new admissions and 400 daily outpatient visits (Waithera et al., 2017). It offers outpatient, inpatient, surgical, medical, maternity, radiology, laboratory, physiotherapy and counseling services (Waithera et al., 2017).

The population in this study was nurses working in the newborn unit, Kisii Teaching and Referral Hospital. The study used a cross sectional descriptive design which utilized qualitative approaches and described the challenges faced by nurses during care of preterm babies during the neonatal period in the newborn unit, in Kisii Teaching and Referral Hospital. Census method was used whereby all 15 nurses were interviewed. Data was collected using an interview schedule guide and analyzed as themes as they emerged.

Ethical clearance was done by the Moi University, Institutional Research and Ethics Committee (IREC). Then permission was also sort from Kisii county research and ethics committee and Kisii Teaching and Referral Hospital Administration. The researcher further informed the unit manager of newborn unit and nurse in-charge of the newborn unit of the research and asked them to give permission. All participants were required to sign an informed consent which explains the purpose of the study, benefits and risks before commencing the study. Human right that required protection was put into consideration. This included right to privacy, right to anonymity and confidentiality, protection from discomfort and harm and right to fair treatment.

Findings and Discussion

The challenges were summarized in the following ten themes; lack of knowledge among care providers and parents, inability to access laboratory results, inadequate supply of drugs and non-pharmaceuticals, shortage of staff, lack of an isolation room, inadequate space, congestion, psychological distress to the mother, lack of essential equipment, and lack of constant supply of power.

Theme 1: Lack of knowledge among care providers and parents

Lack of knowledge among care providers on care of preterm babies is one of the challenges mentioned. One of the nurses said that;

“there is lack of sufficient knowledge on care of preterm babies among some of the health care providers while some of them have a wrong attitude towards preterm babies. Some may say like, this is just a preterm, no need to struggle for a good outcome.”

Not all nurses are trained on preterm care. Out of the 15 nurses only 2 were trained on neonatal care and one on pediatrics after the basic college training. The rest are trained on the job. This can have a bearing on the attitude towards preterm neonates.

One nurse said;

“Some preterm babies are referred while they are poorly covered and by the time the baby arrives at our facility it is in hypothermia, and this makes the outcome of the baby poor while other referring nurses disconnect oxygen as they climb up to the unit..... Making resuscitation very difficult.”

The nurses from the surrounding facilities could also not be trained. According to (Vesel et al., 2015) preterm babies need to be cared by trained neonatal nurses who will be able to give quality care. Most nurses said that parents do not have knowledge on care of preterm babies which makes it difficult for them to follow instructions.

Theme 2: Inability to access laboratory results

Inability to access immediate laboratory results was another challenge. One of the nurses said;

“The lab is far and sometimes the machines are not working, so resuscitation and management of the neonates is done blindly.”

The hospital has one laboratory that serves all the departments so results that are needed urgently are not delivered on time especially during an emergency.

Theme 3: Inadequate supply of drugs and non-pharmaceuticals

Supplies like gowns for the mothers are not enough. A nurse said;

“a mother may wear a gown for two days without changing and this can increase the risk for infection to the neonate.”

There not enough sandals for changing when entering into the newborn unit. A nurse said;

“imagine, sometimes mothers have to step on their bare feet as they come to check on their neonates.”

Gloves to wear as provides give care to preterm babies are not in constant supply. Another nurse said that;

“we are forced to use the same pair of glove in more than one patient and this puts the preterm baby at risk for infection.”

Nappies/diapers for changing the preterm babies are not provided, one of the nurse said,

“some mothers cannot afford disposable diapers therefore they use linen which they are not able to clean appropriately posing a risk for infection”.

Sometimes drugs are not available in the hospital pharmacy,

“these force the parents to buy and if they cannot afford, then treatment is delayed or some babies may miss the drugs completely.”

Most nurses said that insufficient supply of drugs especially second line drugs which are expensive and some parents may not afford “This makes the preterm babies to miss drugs and stay long in the unit”. These supplies are essential in care of preterm babies and if not supplied constantly, care is compromised. These finding are similar to study done in Kenya in eight first referral level hospitals where hospitals had insufficient staff, lacked some equipment, drugs, laboratory tests and consumables (Opondo et al., 2009).

Theme 4: Shortage of staff

There is shortage of staff;

“the unit has only one doctor covering the unit at night and the same doctor covers the pediatric ward, therefore if he/she was handling another patient in that ward it may take long for him/her to come especially during an emergency.” Another said, *“Sometimes you can find yourself on duty nursing about 40-70 neonates. For sure you get confused on what to do and the neonates need close monitoring. This forces me to do short cuts during procedures in order to accomplish tasks assigned.”*

Care of neonates in a newborn unit requires close monitoring. WHO recommends one neonatal nurse for 6-8 neonates requiring routine care and one nurse for one or two neonates requiring intensive care(ACOG - AAP, 2012). The ratio of one nurse to 40 neonates may compromise care.

Theme 5: Lack of an isolation room

Also, there is no special room for the preterm babies. Preterm babies are put in the same room with term babies and are mixed with those referred from other facilities or those born at home, and may even be put in the same cot or incubator. There is also no isolation room for babies with infections. Most nurses said;

“we put all newborns in the same room, pretem babies, term babies, sick ones and those born in other facilities and those born before arrival. We only isolate neonates with infectious conditions”

Theme 6: Inability to clear the hospital bill

There is a challenge when discharging the preterm neonates mainly those preterm babies who were admitted from other facilities. They need to pay the hospital bill and since they stay long in the hospital, the bill is usually huge and some parents are unable to clear it. One of the nurses said,

“.....babies admitted from other facilities and if they do not have National Hospital Insurance Fund (NHIF) card, clearing the hospital bill becomes a challenge.”

The mothers who deliver in the facility and their neonates are admitted in the nursery the bill is usually cleared by free maternity. However, if the preterm is referred from another facility, then the bill has to be paid by the parents. This leads to preterm babies staying in the hospital even after discharge and consequently leading to congestion in the unit.

Theme 7: Psychological distress to the mother

The nurses expressed that, most mothers are psychologically tortured as to why they got preterm babies while others are abandoned by their families. Gallegos-martínez, (2013) states that parents of hospitalized infants go through altered emotional states throughout hospitalization, such as guilt and depression.

Theme 8: Congestion

The space in the nursery at KTRH is small vs. the number of babies admitted into the unit. One nurse said;

“This is the only hospital around that has a newborn unit, so we admit many babies, averagely the nursery has 70 neonates per day, this makes the unit overcrowded”. Some said, “Imagine if you added the 70 babies and 70 mothers plus student nurses and the staff, the place becomes congested.”

Another one said,

“the nursery is small and the babies are too many”

This finding is similar to a study done in Uganda that found that the facilities in Uganda lack adequate space for care of preterm babies (Waiswa et al., 2010).

Theme 9: Lack of essential equipment

Another challenge was lack of essential equipment to care for the preterm baby. One nurse said,

“There are only three working incubators in the unit and we admit many preterm babies. This makes us to put 4-5 preterm babies to share one incubator.” Another one said, “there are few oxygen humidifier bottles, which make the nurses to improvise and use NGT tubes to connect to the humidifier so that the neonates can share the oxygen.”

This finding is similar to a study done in Malawi where resources were a major challenge in care of neonates (Koenraads et al., 2017).

Theme 10: Lack of constant supply of power

Electricity goes off often which makes it difficult to maintain the temperatures of the preterm babies since the incubators are not connected to the generator.

Conclusion

There were various challenges that are faced by nurses while taking care of the preterm baby. These included lack of knowledge among care providers and parents, inability to promptly access laboratory results, inadequate supply of drugs and non-pharmaceuticals, shortage of staff, lack of an isolation room, inadequate space, congestion, lack of essential equipment, and lack of constant supply of power.

Recommendations

This study recommends training of nurses who are working in the nursery on preterm care. It also recommends that the hospital to improve equipment, supply and increase number of health care providers.

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