THE 'IMPOSSIBLE' JOB OF BEING A NEONATAL NURSE

The experience of nurses in Nairobi's New Born Units



Key Messages

- Newborn outcomes are especially bad in lower and middle-income countries, for example,
 Kenya has a neonatal mortality of 22 deaths per 1,000 live births.
- Limited quality of nursing care, mostly because of poor nurse-patient ratios aggravates the problem of quality of care to sick newborns. For example, nurses in Nairobi's public hospitals take care of 20 40 newborns, 10 times the UK average.
- Given the poor newborn outcomes and low nurse-to-patient ratios, nurses are forced to innovate in order to provide care in this low resource environments.
- The innovations nurses come up with to deliver care in this kind of health systems can be broadly categorized into two, task shifting and collective coping strategies.
- If the country were to achieve the targets set in the Sustainable Development Goals, there is need for strategies for reducing work related stress for nurses in units and consideration for carefully designed context-specific formal task shifting programmes.

Introduction

The provision of high-quality care to sick newborns presents challenges in any health system. Quality nursing care is a critical component of the care sick newborns need to survive their first days of life; and international guidelines suggest that even for babies who do not require intensive care, there should be one nurse for every 2 - 4 sick babies. In low resource settings, neonatal mortality is 10 times higher than in developed countries and therefore the need for high quality nursing is even greater. However, recent studies conducted in Nairobi show that one nurse takes care of between 20 - 40 newborns, at least 10 times above the UK average.

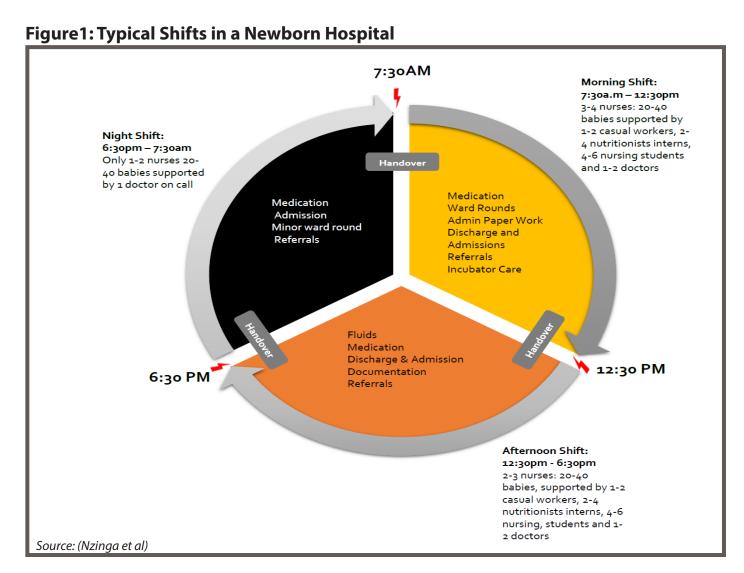
In Kenya, although there are around 50,000 nurses registered to practice, fewer than 17,000 offer services in the public sector, a sector that the poor rely on the most for inpatient newborn care. Efforts to address this deficit of quantitative and subsequent qualitative care is hampered by inadequate public finances, especially in the context of competing public policy priorities. To overcome hurdles in research constrained environments nurses, innovate by task Shifting and devising collective coping strategies. This brief summarizes four research papers by KEMRI-Wellcome Trust researchers, detailing the experience of task shifting and collective coping strategies by nurses in newborn units of public hospitals in Nairobi.

Experience of Task Shifting in Africa

Task shifting has a long history spanning non-physician clinicians to community health workers but gained prominence as a means of scaling up and decentralizing HIV care. The practice has been happening informally in the continent in response to shortages of human resources across various settings. However, task shifting studies have often focused on their impact on patient outcomes, little attention has been paid on the effects of task shifting on healthcare workers and their needs. This brief provides a glimpse into informal task shifting practices that emerged organically in busy units in Nairobi county, and makes specific reference to, the context and related coping strategies by nurses in undertaking what is essentially an impossible job.

Context of Task Shifting in Newborn Units in Nairobi

Nurses in newborn units in Nairobi are busy. Nurses follow a standard routine working alongside clinicians, nurses, nutritionists and students during the morning shift; then shorter and less busy afternoon shifts, but commonly made longer by delays in the arrival of the oncoming shift nurses. The night shift is the longest, staffed with often one nurse dealing with 15–20 babies over 13 hours (Figure 1). The shifts are characterized by routine activities which nurses always adhere to as a form of relieving pressure from heavy workloads and competing priorities.



These routines were strongly adhered to and only often disrupted by emergency admissions, unexpected staff absences and changing conditions of the very sick babies. In those situations, nurses were forced to make decisions about how to use their time, judging who needed immediate care and who could wait. They did this by using a form of 'Subconscious Triage'. In this context, the more technical tasks were prioritized over bedside nursing care and there was informal delegation of non-technical tasks to lower cadres (Table 1).

Table 1: Task delegation and shifting in practice based on our ward observations

Category of delegation	Task areas
Tasks that can never be delegated to someone other than a qualified professional	1.Ordering supplies and equipment from the stores and pharmacy 2.Resuscitation of babies 3.Final assessment of nursing students to qualify as nurses 4.Referral of babies from one hospital to an often-higher care hospital
Delegated to student nurses undertaking clinical training attachments	1. Weighing babies 2. Taking vital signs observations 3. Giving intravenous fluids 4. Filling the nursing Kardex (a summary of individual patient needs used by 5. nurses to communicate important information on their patient and often 6. updated at every shift change). 7. Giving treatments—either oral, intra-muscular or intravenous
Delegated to mothers	1.Cup and NGT (naso-gastric tube) feeding of babies 2.Filling amounts of milk fed to babies on feeding chart 3.Top tailing (cleaning baby from head to toe)
Delegated to support staff	1.Dusting and cleaning incubators 2.Cup and NGT (naso-gastric tube) feeding of babies 3.Top tailing (cleaning baby from head to toe)
Tasks sometimes done/left undone	1.Education 2.Emotional support

Source: (Nzinga et al)

Other collective coping strategies used to reduce stress and their effect on nursing work

A profile of a Kenyan newborn unit nurse shows that, "they work long hours with little supervision, for inadequate and often delayed salaries, in ill-designed wards, staffed by far too few nurses given the pressing need." This sub-optimal environment within which newborn unit nurses operate in calls for adaptation and coping strategies to manage work related pressures (Table 2).

Table 2: Common Coping Mechanisms in Newborn Units

Coping Mechanism	Insights and rationale into coping mechanism
Routinisation	Routines form the backbone of shift work in NBU units. They are sets of ordered tasks that define the standard of care for newborns and allow nurses to make sense and adjust to an otherwise unbearably chaotic workplace.
Categorisation	NBU nurses often categorize newborns based on the level of care they need. This might include Category A – high dependency babies that require closer attention, regular monitoring and medication and; Category – B, babies that might not need as much care. This "sub conscious triage" concentrates care to a limited number of babies thus reduces nursing anxiety through providing a rationale for limiting the emotional exposure of nurses to sick infants.
Shift Patterns	The morning busiest, with the majority of clinical and 'routine' work happening during this shift. The afternoon shift, though the same length as the morning shift, is much slower pace. The night shift is the longest at (14 hours). Though the night shift is always staffed by more than one nurse, it is common for nurses to rest. No new work is undertaken, and the overall goal seems to be limited to monitoring and maintenance.
Flexibility	The nurses demonstrated a significant degree of flexibility in their dealings with each other. This flexibility and understanding among nurses also ameliorated the external stresses on nursing work such as home life and commuting.
Extreme Pragmatism	The environment nurses operate in is fluid, fast-paced and presents new challenges on many instances. In such instances nurses, often move beyond normal routines, and at times adopt practical solutions to operate in under-resourced and sub-optimal work environment.

Conclusions

This brief portrays the context and extreme circumstances that characterize newborn nursing work. But there is also a reckoning that newborn nursing and newborns do not receive adequate attention. For example, a respondent one of the ethnographic studies summarized in this brief said that, "if they die very quickly then they have the same inpatient number as the mother and the same name as the mother, so they are non-entity if you like."

"So culturally, we don't even do audits, we don't even do mortality audits when a newborn baby dies. But we do audits, serious audits when a mother dies, serious audits."

This marginal treatment of newborns lives deprives of newborns units the resources they need and highlights the need for strategic human resources management to get more out of the nurses available.

Policy Recommendations

- 1. There is potential space for formal task shifting within the everyday routines of newborn nursing in Kenya. Careful contextualization can help inform task-shifting design.
- 2. Although policy making attention paid to improve patient outcomes is welcome, there's need to protect newborn unit nurses from work related stress and anxiety.
- 3. Interventions to reduce stress and anxiety must combine the addition of new human and technical resources with managerial improvements and co-design with nurses if improvements to the quality of care are to be realized

About the Research

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Related Publications

- 1. Mijovic et al (2016) What does the literature tell us about health workers' experiences of task-shifting projects in sub-Saharan Africa? A systematic, qualitative review. Journal of Clinical Nursing Volume 25, pg. 2083–2100,https://www.ncbi.nlm.nih.gov/pubmed/27338023
- 2. Nzinga et al (2019) Exploring the space for task shifting to support nursing on neonatal wards in Kenyan public hospitals. Human Resources for Health, Volume 17, Number 1. https://human-resourceshealth.biomedcentral.com/articles/10.1186/s12960-019-0352-x
- 3. Jepkosgei et al (2019) Maintaining Distance and Staying Immersed: Practical Ethics in an Under resourced New Born Unit. Journal of Empirical Research on Human Research Ethic pg. 1-9. https://www.ncbi.nlm.nih.gov/pubmed/31092099
- 4. McKnight et.al Collective strategies to reduce stress and their effect on nursing work: An ethnography of neonatal nursing in a low-income setting (Submitted for publication)

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