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### Can managers empower nurse-midwives to improve maternal health care? A comparison of two resource-poor hospitals in Tanzania

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#### SUMMARY

Maternal mortality is very high in Tanzania. Competent hospital care is key to improving maternal outcomes, but there is a crisis of availability and performance of health workers in maternal care. This article uses interviews with managers, nurse-midwives, and women who had given birth in two hospitals providing virtually all the emergency maternal care in one Tanzania city. It contrasts women's experience in the two hospitals, and analyses interconnections with nurse-midwives' and managers' experiences of working conditions. The conceptual literature on nurse empowerment identifies some key explanatory variables for these contrasts. Staff experienced less frustration and constraint in one of the hospitals; had more access to structurally empowering resources; and experienced greater congruence between job commitment and working culture, resulting in better work engagement. Conversely, nurse-midwives in the other hospital were constrained by supply shortages and recurrent lack of support. Contrasting management styles and their impacts demonstrate that even in severely resource-constrained environments, there is room for management to empower staff to improve maternal care. Empowering management practices include participatory management, supportive supervision, better incentives, and clear leadership concerning ward culture. Structural constraints beyond the capacity of health facility managers must however also be addressed. © 2015 The Authors. International Journal of Health Planning and Management published by John Wiley & Sons, Ltd.

KEY WORDS: empowerment; engagement; maternal care; nurse management; Tanzania

#### **INTRODUCTION**

'Women get there [to hospital], then they die.' Hospital Director, Tanzania.<sup>1</sup>

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This doctor was citing a local maternal health initiative in 2011. Its initial findings showed that many women who died of maternal causes lost their lives after getting to hospitals. He argued that the core problem in many hospitals was management weakness, a view reflected in Tanzanian government policy and donor-supported initiatives (Touch Foundation, 2009; Prime Minister's Office, 2013).

The maternal mortality ratio remains very high in Tanzania: an estimated 410 per 100 000 live births in 2013,<sup>2</sup> far off the MDG5 target for Tanzania of 265 by 2015. Competent hospital care is key to reducing maternal mortality because obstetric emergencies such as haemorrhage, sepsis, obstructed labour and eclampsia account for an estimated 80 per cent of maternal deaths in Africa (Khan *et al.*, 2006; Kruk *et al.*, 2007). The crisis of availability and performance of health workers is a central cause of failures of maternal care in Africa (Jewkes *et al.*, 1998; Gerein *et al.*, 2006; Mastad, 2006). Finally, the experienced quality of the midwife–patient relationship during labour is an important determinant of maternal outcomes (Hunter *et al.*, 2008).

This article employs case studies of two Tanzanian hospitals to argue that a key source of poor maternal hospital care is disempowerment of nurses-midwives and that even within very severely resource-constrained environments, good management can empower staff to do better.

#### MANAGEMENT, EMPOWERMENT AND WORK ENGAGEMENT IN NURSING

Hospital maternal care is highly responsible work, in a pressured environment, involving pain and emotion. It requires close attention, professional competence and good communication. The birth process is risky, and crises can arise rapidly and unexpectedly. Reports of rudeness, inattention and abusive behaviour of nurses towards women in labour wards are long standing, recurrent and not limited to low-income contexts (Jewkes *et al.*, 1998; Hunter *et al.*, 2008; Våga *et al.*, 2013).

A body of research argues that empowerment of nurses, that is, enabling nurses to act, to obtain power, influence and control, is essential to professional development and effective health care (Laschinger *et al.*, 2010; Rao 2012). Conversely, a lack of empowerment—a context of frustration and constraint—undermines nurses' ability to provide safe, good quality care (Manojlovich, 2007). It follows that nurse managers should empower nurses to provide good care for their patients, within an environment that fosters professional practice and effective relationships (Laschinger *et al.*, 2010: 5) and that nurse managers also need empowerment and support (Trus *et al.*, 2012).

This nursing literature builds on Kanter's classic (1977) theory of structural empowerment in organisations (Laschinger *et al.*, 2010). Power is the ability to mobilise information, resources and support to get things done. Kanter describes four work empowerment structures: access to information (data, technical knowledge, and expertise); access to resources (supplies, equipment, and personnel); access to support (guidance, feedback, and direction by supervisors, peers, and subordinates); and opportunity for advancement (growth, mobility and the chance to learn).

In applications to nursing, empowering structures are found to include reduced work pressure, greater peer cohesion, more support from supervisors, and greater staff

<sup>2</sup>WHO data http://gamapserver.who.int/gho/interactive\_charts/mdg5\_mm/atlas.html

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autonomy (Krebs *et al.*, 2008). More empowered nurses report higher levels of organizational commitment and exhibit less burnout (Hatcher and Laschinger, 1996). A systematic review found that nurse managers' work-related empowerment correlated positively with job satisfaction and organizational support (Trus *et al.*, 2012).

Some individuals will work effectively even in disempowering environments (Conger and Kanungo, 1988). The nursing literature on psychological empowerment (Wagner *et al.*, 2010) identifies four key cognitions: *meaning*, similarity between a nurse's beliefs, values and job requirements; *competence*, confidence in one's abilities; *self-determination*, control over one's work; and *impact*, influence on organisational outcomes. Psychological empowerment influences organizational commitment, job strain and work satisfaction (Laschinger *et al.*, 2001).

Psychological empowerment links to research on 'engagement', defined as a positive, fulfilling work-related state of mind (Schaufeli *et al.*, 2002: 74). Researchers on nurses' engagement have developed a model of self-care to tackle burnout (Vinje and Mittelmark, 2007). An application to nurses and midwives in Uganda (Bakibinga *et al.*, 2012) found that nurses who thrived identified as key: feeling appreciated, manageable workloads, available resources, and positive working relationships with workmates and supervisors with similar values. They found their work meaningful when it was a job they wanted to do, when they wished to be of service to others and had the required skills.

Ward culture, furthermore, can trigger engagement and facilitate patient-centred care (Abdelhadi and Drach-Zahavy, 2012). Midwifery requires teamwork, mutual professional support, and collaboration on the ward between midwives and the women they care for, to ensure patients' safety (Hunter *et al.*, 2008). This literature on empowerment and engagement identifies a number of variables that emerged repeatedly when we explored our data for reasons for women's contrasting experience of hospital deliveries in two adjacent Tanzanian hospitals.

## MATERNAL CARE IN TWO URBAN HOSPITALS: METHODS AND BASE DATA

This article analyses contrasts in experiences of maternal care in two large hospitals that were providing, in 2011, virtually all the emergency obstetric care (EMOC) in one Tanzanian city. One was a regional government hospital also acting as an urban district general hospital, the other, a faith-based referral hospital. Both provided the full range of normal delivery and emergency maternal care.

The findings presented here are drawn from a larger research project.<sup>3</sup> That project explored connections between women's experiences of giving birth, nursemidwives' experiences of working conditions and management, payments for maternal care, and workplace ethics. Fieldwork was undertaken in four districts in two Tanzanian regions, in September–October 2011.

In the urban district where these two hospitals are located, the sample of facilities also included two small hospitals (one private, one parastatal), and 10 health centres and dispensaries. Interviewees included the clinician in charge of each facility, and staff managing and providing maternal care; individuals often had multiple roles. In

<sup>3</sup>Ethics, Payments and Maternal Survival, 2009-11: refer to Acknowledgements

© 2015 The Authors. International Journal of Health Int J Health Plann Mgmt 2015 Planning and Management published by John Wiley & Sons, Ltd. DOI: 10.1002/hpm all, 2 consultants in gynaecology and obstetrics, 1 medical officer, 3 assistant medical officers, 18 nurse-midwives including 2 with nursing degrees, 4 clinical officers, and 3 administrative staff were interviewed.

Women were interviewed at the household level about their experiences of giving birth. Two streets or villages in each of three wards in each district were chosen, displaying contrasting economic circumstances, and ten households selected randomly in each: 240 households. All women in the households who had given birth in the last 5 years and/or were currently pregnant were interviewed on their experiences of maternal care. In this district, 63 women interviewed had a mean age of 28, and 33% were pregnant at the time of the interview. Almost all had some primary education, 66% had completed primary and 21% had some secondary education. Most relied on income from small businesses; just 11% were wage earners.

Structured questionnaires captured households' socio-economic characteristics, and facilities' activity, staffing levels and availability of essential supplies for maternal care. A supplies checklist included six essentials for handling normal in-patient delivery and 15 requirements for assisted delivery and emergencies.<sup>4</sup> Semi-structured questionnaires with provision for in-depth probing were used in interviews. This article draws on women's responses to open questions on reasons for choice of facility (if any) for delivery; experience of care at birth, with prompts on attitude of staff, availability of supplies, and information provided; and payments made (formal and informal) with views on the impact of payments on care experienced.

This article triangulates women's experiences with responses from managers in the two hospitals to questions concerning finances and charging; staff management, communication and evaluation of performance; staff morale and incentives; and their own scope for effective supervision. Management interviewees included nurse-midwives responsible for managing maternity services and for supervising maternity wards. The findings also draw on nurse-midwives' responses to questions concerning experiences of working conditions; incentives and disincentives (with prompts on salaries, work pressure, shifts and breaks, relations with colleagues and patients); payments and bribes; and experience of technical and emotional support from doctors, managers and peers.

Questionnaires were prepared in English, translated into Kiswahili, field tested and revised. Interviews were conducted mainly in Kiswahili. Responses were recorded in direct speech in Kiswahili; translated into English by the interviewer on the same day; and the English translations checked by the researchers. Qualitative data were coded and analysed using NVivo. Systematic analyses identified patterns and commonalities or differences in experiences, and this analysis identified the contrasts discussed here.

The Tanzanian National Health Research Ethics Review Committee approved the project. Respondents were informed about the objectives of the study, assured of anonymity, and their informed consent obtained. Data were coded to protect identities.

Table 1 provides some basic data about the two hospitals.

<sup>4</sup>The list was compiled on the basis of expert advice. The six normal delivery essentials were clean latex or sterile gloves; disinfecting solution; delivery bed; scissors or blade; cord clamp or tie; suction apparatus (bulb or machine). The emergency requirements were syringes and needles; sutures; intravenous solution and perfusion set; injectable oxytocic medication; oral valium or magnesium sulphate; injectable entibiotic or gentamicin; injectable hydralazine; injectable ergometrine or methergine or misoprostol; vacuum extractor for assisted labour; vacuum aspirator or D&C kit.

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	Hospital A	Hospital B
Ownership	Faith-based	Government
	organisation (FBO)	
Level	Referral hospital	Regional and
		district hospital
Scope of	Normal deliveries	Normal deliveries
maternal care	and all EMOC	and all EMOC
Maternity beds:	14	15
delivery room,		
active labour, admissions		
Ante-natal and post-natal	55	56
beds	55	20
Number of specialists in	8	2
obstetrics and gynaecology	0	2
Number of medical officers	2	2
working in maternity	2	2
Registered nurse-midwives	10 (not including	8 (including
in maternity	post-natal ward)	post-natal ward)
Enrolled and other	9 (not including	15 (including
nurse-midwives		
	post-natal ward)	post-natal ward)
Medical attendants in	7	5
maternity wards	4 11	A 11
Maternity sample supplies	All	All except oral
for normal delivery and		valium, magnesium
comprehensive EMOC:		suphate, and vacuum
availability on day of visit		extraction kit/vacuum
		aspirator.
Deliveries per day	25-30	35–45
Maternal mortality	3–4 a month estimated	2 a month on average
		over previous 8 months
Financial autonomy	Devolved budget: mainly	Budget held by Regional
	government-funded plus	Council; retained user
	fundraising/ business for	fees for hospital use.
	hospital benefit	
Charging	Formal charges for normal	No formal charges
	delivery; no charge for	-
	emergencies and referrals	

Table 1.	The two	hospitals,	basic data
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#### CONTRASTS IN WOMEN'S EXPERIENCES OF MATERNAL CARE

There were, as Table 1 suggests, many similarities between these two hospitals. Both had large maternal case loads, including normal deliveries and in-patient ante-natal and post-natal care, and many emergency admissions. Local women with pregnancies regarded as at-risk were sent to the regional hospital (B) for delivery, particularly difficult cases to the referral hospital (A). Hospital A also took some private patients.

Nevertheless, the qualitative data analysis showed that women's experience of delivery and emergency care in the two hospitals differed sharply.

#### Hospital reputations and women's experience of quality of care

Of the 63 women interviewed in this district, 35 had delivered in one of the two hospitals studied here, or had been taken there for emergency care: 14 at hospital A and 22 at hospital B, one woman having been referred from B to A. Experience of each hospital, and the reports of others, had influenced decisions on where to deliver. Women discussed their experiences and had followed other women's advice as well as the advice of health centre and dispensary nurses.

Hospital B's reputation was worse than that of hospital A, but it was mixed. Of the 18 women who decided to deliver at hospital B (not referred in emergency), 10 said they did so because it offered emergency back-up, skilled and experienced staff, and/or they expected to pay little or nothing, for example,

"I chose to deliver at [Hospital B] because their services are good, less expensive, and in case of emergency, one could get all such services there." (Woman 14)

Others had gone more reluctantly, some citing reports or past experiences of bribery and other bad behaviour from staff. One woman went to hospital A for delivery despite being referred to hospital B. She said she did not trust the services at hospital B, particularly given that she was living with HIV. She thought hospital B nurses were not careful enough and feared that her child could get HIV. It was better, she said, "to pay in order to secure the life of my child" (Woman 12).

Lower level facilities often referred first pregnancies and those after four births for delivery at hospital B and reported some refusals:

"Women tell us, even if you want to refer them to [Hospital B] they refuse, and say we would rather die here." (Nurse-midwife, parastatal hospital)

There were no reported refusals of referrals to hospital A.

Hospital A staff recognised that the reputation of hospital B increased their workload. The nurse-midwife managing maternity services said, "some people self-refer; they say they don't like Hospital B." The Director expressed frustration:

"I cannot tell [Hospital B] what to do. Women say, 'why should I go to [Hospital B] and die?'."

All the 11 women who had chosen to go to hospital A for delivery (not emergency referrals) cited a reputation for good care, for example,

"I also had discussion with mothers who delivered at [Hospital A], they encouraged me, saying their services are good." (Woman 23)

Nevertheless, both hospitals were the subject of complaints. Three women complained of delays in being attended to, and rude language from nurses, in hospital A, for example,

"At two thirty in the morning my labour advanced too fast. I called for a nurse several times, but no one came to help. I continued calling while struggling in bed until 3 a.m. when I delivered [alone] ... This was dangerous for my life and my child's life." (Woman 23)

"The nurses at the hospital are very harsh, especially when you seek advice from them; instead of responding politely, they will shout at you harshly." (Woman 34)

However, over half of the women who had given birth at hospital B complained about staff behaviour. For example,

"They are so rude/harsh and do not have good hearts to help pregnant women who are really in need at the time of giving birth." (Woman 13)

"Nurses humiliate women who go there for delivery" (Woman 21)

However, a minority had had a good experience in hospital B, for example,

"The delivery service I got was good because I was never abused or shouted at during delivery." (Woman 1)

#### Formal and informal payments and experienced quality of care

Hospital A levied formal charges for normal deliveries, but emergency treatment was free. Hospital B did not charge formally, under Tanzanian government policy of free maternal care (Table 1). Women who chose to deliver at hospital A therefore were prepared to pay. Women who delivered at hospital A were also more educated: half had completed secondary education, while 86% of those who went to hospital B had only primary education or below. Those who delivered at A also had more household assets on average than those at hospital B, and two were private patients.

Women who went to hospital A saw good value for money.

"The services I got at [Hospital A] during delivery were good. Even if I could not pay Tshs. 15,000 [the delivery charge] I am sure they would attend to me and I could pay afterwards." (Woman 1)

One woman (12) explained that she was very pleased with the care at hospital A because the midwife was present throughout. She thought that she might well pay the same informally in hospital B. No woman interviewed had been asked for informal payments at hospital A.

Another woman contrasted her experience with the reputation of hospital B:

"The service [in A] is good;... in my opinion the charge for admission and inpatient care means that everyone can go there. ...Here in this city we have a ... hospital called [B], but its services are very poor. You find a mother delivering unaided at [Hospital B]; it is torture." (Woman 35)

Of those women who had delivered at hospital B, just over half had also paid nothing. The others said that they were asked by nursing staff for informal payments, and women linked accounts of bribery in the hospital to delays and abuse by staff; for example,

"I gave Tshs. 5000 to the nurse who assisted me during delivery. I gave it to her before the baby was born because I was scared and I was confused by the labour pains and the women in the labour ward who kept saying that if you give

something to the nurse, at least you get someone to pay attention to you. ... Yes, it was much better than before I had given something, or compared to the women who did not have anything to give." (Woman 37)

"The service is not good at all ... the attendants are after money; they do not attend to patients with a clean heart<sup>5</sup>; they do not care about the mothers. They harass and abuse us.... You can only get supplies after giving gifts. ... Actually the service I got ... was because I paid for it; the amount I paid [Tshs. 4000] affected the kind of services I got, because if I had nothing, it means I would not have been attended." (Woman 40)

One woman had been treated well without payment but had seen the problems experienced by others:

"I thank God that I received good care, although some of the nurses use abusive language, and if you do not have money to give a nurse or you do not have a nurse who knows you, you will get a lot of problems and they will not take care of you." (Woman 27)

We also asked the facility staff about informal payments. In hospital B, the nurse-midwife managing the maternity wards admitted that women sometimes offered 'gifts':

"A patient may say, 'sister, please assist me, I will give you some money for a cell phone voucher'."

She insisted that she had not seen or heard of staff demanding anything from patients. However, a nurse-midwife on the labour ward stated in general terms that

"asking for bribes is a common problem even though the services are supposed to be free. Most of the women whom we help to deliver give us a thank you in money - not much. They give Tshs. 1000 to 5000 and give us *vitenge* [fabric], chicken, fish and so on."

At hospital A, the management claimed to take strong measures to sanction inappropriate behaviour such as corruption and mishandling of patients. They also used strong negative language, characterising bribes as 'theft':

"There is zero tolerance of theft. There is also zero tolerance of abusive language and bribery. Complaints are taken very seriously, and documentation and evidence sought. Theft and bribery can lead to sackings, and in the past they have. ... There has been no recent case of bribery found on the maternity wards." (Nurse-midwife managing maternity services)

One of the nurse-midwives agreed:

"...It is not common for midwives to ask for money. It is not an acceptable practice, and the management is very firm on this."

<sup>5</sup>A literal translation: To have a 'clean heart' implies providing care without expecting something in return.

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#### CAN MANAGERS EMPOWER NURSE-MIDWIVES?

#### MANAGEMENT CONTRASTS AND NURSES' WORKING EXPERIENCE

To what extent can the contrasts in women's experiences in these two hospitals be traced to differences in management practices and to nurse-midwives' responses? We show in this section that nurse-midwives' experience of control within their working environment, and the extent to which they felt able to do a good job, was linked to three major aspects of management of the maternity services: pressure of work, the management of essential supplies for maternal care, and the support and incentives provided to nurse-midwives.

#### Pressure of work and staff shortages

The pressure of work was very high in both hospitals' maternity wards. The word 'overwhelmed' recurred in interviews in both hospitals. Table 1 shows that the wards in the hospitals were of similar size but with fewer staff (notably specialists) and higher numbers of deliveries in hospital B.

Detailed data are not available, but hospital A was taking many more emergencies and more severe emergencies, than B. Emergency referrals included obstructed labour, severe hypertension, and eclampsia, post-partum haemorrhage, and post-natal complications including severe anaemia, caesarean section complications, puerperal sepsis, post-delivery eclampsia, and cardiomyopathy.

However, hospital B was serving as a district as well as regional hospital and doing large numbers of deliveries (with women sometimes doubling up in beds) and an estimated five to eight caesarean sections a day, similar to hospital A. Furthermore, Table 1 underestimates the staffing disadvantage in hospital B: Hospital A also had medical interns on call in the maternity wards, and qualitative interviews showed that not all nurse-midwives in hospital B had full midwifery training.

The nurse-midwife supervising the maternity wards stated that hospital B allocated eight nurse-midwives per day shift and four at night, for all the wards including post-natal. Hospital A allocated six to eight on day shift *not* including the post-natal wards that received many emergencies. Both supervisors said that the worst staff shortages for the labour ward occurred at night. The maternity services manager in hospital A explained the implications for patients' safety:

"Yes, there are serious staff shortages in maternity. For example in the labour ward, at night, the ward has 1 RN [registered nurse] and 2 ENs [enrolled nurses]. It is dangerously low. The ward needs 5. Suppose, as usual, you have a caesarean section? A nurse has to go to the theatre with that patient. Then you have at any one moment, say, a delivery, one person waiting who needs monitoring, and one ante-natal admission. How should the two remaining people divide up? Who is organising the medications? It is not safe. And these are long shifts."

There was an acknowledged interconnection in both hospitals between pressure of work and bad language from midwives. In hospital A,

"Sometimes the nurses feel stressed and overworked, and this can have implications on the relationship with patients!" (Maternity supervisor)

The maternity services manager in A said, "A nurse cannot use abusive language, this is not professional". However, she also pointed out that

"Nurses are human beings. When one midwife finds herself struggling with three difficult deliveries, then we need to give support, not just blame."

In hospital B, all the interviewed staff mentioned shortage of staff and overwork:

"Here it is heavy duty - there are deliveries all the time. We have two wards, but staffing is basically for one ward." (Maternity supervisor)

"It is hard to work in the maternity ward. In seven days we get only one day off. And this is when you have had a night shift. So we are so overworked and exhausted." (Nurse-midwife)

Some women also recognised the problem. A woman who described delivering alone and unaided in hospital B, nevertheless said

"What I learned from that experience is that the nurses are overwhelmed by work. The women who had come for delivery on that day were many compared to the number of nurses who were on duty." (Woman 3)

In hospital B, the facility management were aware of abusive language. The Director said that

"You can't blame the nurses ... At the moment we deliver 40-70 cases in 24 hours with only three nurses [per shift]. They will burn out."

However, there was no direct acknowledgement in the hospital B management interviews that bad language was nonetheless unacceptable behaviour. This silence contrasted with the stronger statements by hospital A's Director and nurse manager.

#### Managing in a resource-poor environment: essential supplies

Management in both hospitals faced acute resource shortages, and one key source of staff frustration and anxiety concerned the availability of essential supplies such as medication and protective gloves. When visited, however, most of our checklist of essential maternal supplies for delivery and EMOC were available in both hospitals (Table 1).

In hospital A, the qualitative evidence from nurse-midwives confirmed the availability of essential supplies, with a commitment to availability that was said to start at the top:

"The DG is a gynaecologist and is always arguing for women. If you run out of something, he wants to know why it wasn't ordered well in advance! ... If you don't make a good estimate, for enough gloves for example, it is your fault ... If you don't have the right supplies, you have to go to the administration and explain why." (Manager, maternity services)

"Supplies are there, no problem." (Supervisor, maternity wards)

The women's interviews also supported this claim, for example,

"Even though I prepared myself and bought requirements like gloves, they were not used in the hospital. They used hospital supplies." (Woman 10)

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In hospital B, the Director did not identify severe problems of availability of supplies. The hospital used money from user fees to fill gaps in government supplies. However, he argued that shortages in lower level public facilities raised their workload: "People are pushed here by lack of supplies elsewhere".

The nurse-midwives in hospital B did however record frustrations associated with missing supplies, for example,

"When we run short of supplies, e.g. gauze, then delivery procedure is a problem, or when we run short of cord ties then we have to do it in an unprofessional way, and too much bleeding can occur."

Women interviewed recorded many experiences of missing supplies, and from these accounts, it is hard to disentangle a lack of supplies on the ward from nurses' claims of missing supplies used to ask for informal payments. It seems likely that both problems were occurring. One woman said that she had bought syringes and gloves from the pharmacy for the nurse-midwives to use for delivery, because the supplies "are not available in the hospital" and that the nurses "become angry" if women arrived without such supplies (woman 13). Another said: "we have to buy them ourselves." (woman 21)

However, others described better experiences in hospital B:

"Medical health supplies and medicine are available at the facility." (Woman 36)

"I did not buy supplies; everything was available [for free] at the hospital." (Woman 16)

These mixed responses suggest that the problem in hospital B was not so much availability of supplies—although this may have been somewhat erratic—as problems of control of their management at ward level.

#### Support and incentives for midwives

In both hospitals, nurse-midwives complained of low salaries and long shifts, especially night shifts, and of insufficient time to rest. However, the hospitals differed in the extent to which nurse-midwives felt supported by managers and doctors and in managers' descriptions of support offered.

In hospital A, there was wide agreement that the management was supportive of staff who, despite overwork, nonetheless felt valued and supported in doing their job:

"Supervisors are facilitating. Even if you go there to report a shortage of supplies they do their best to assist". (Supervisor, maternity wards)

"The hospital recognises and values the work I do." (Nurse-midwife)

Maternity wards had a clear on-call system. Nurse-midwives said that medical back-up was available when required and also support in upsetting situations:

"The technical support system is very efficient; on any shift there is an intern (first on call), a resident (second on call), and a specialist (third on call)." (Nurse-midwife)

"As midwives, we always face situations that can be very depressing, if a pregnant woman dies or if a baby dies. .... the supervisors are always there for emotional support." (Nurse-midwife)

There were also references to mutual support and to appreciation by patients.

"The relationship between health workers is generally good and we work as a team." (Nurse-midwife)

"If all goes well with the delivery, about three quarters of our patients respect us." (Nurse-midwife)

One interviewee recorded with pleasure that she had received an award as best midwife.

In hospital B, by contrast, staff felt that the management was not very supportive:

"Even if you complain about shortages [of supplies], management does not seem to see this as a problem. Generally, management does not seem to recognise and appreciate the work nurses do, and so sometimes nursing and midwifery are not given the required priority." (Supervisor, maternity wards)

A nurse-midwife described one upsetting death from haemorrhage that occurred despite medical intervention and appropriate medication, commenting that after such experiences,

"We do not get any emotional support [from management]; but we do give support amongst each other".

There were comments about lack of medical backup:

"Another challenge is the relationship between midwives and doctors on call. Doctors who are on call are not available most of the time. I cannot explain why ..... We have two doctors [i.e. specialists] but when we have emergencies they are most of the time not available." (Nurse-midwife)

"It is very hard to get technical support from the medical doctors. ... it is common for us to find when we seek technical help that no medical doctor is around, for unexplained reasons." (Nurse-midwife)

In contrast to hospital A, a nurse-midwife in hospital B said flatly:

"Midwives are not respected. This is because this job is a very hard job. The community has a wrong perception of us, they say we have hard hearts and bad language towards the women we are attending."

We also asked about incentives, in the sense of financial and practical support for staff. In hospital A, there were complaints about salary delays, low salaries, and non-payment of allowances. Still, the hospital management was making efforts to provide some financial incentives:

"Of the private patients' payments, a percentage goes for incentives to staff. The rest goes to a basket fund for supplies." (Manager, maternity services)

"The government does not give any allowances, but [Hospital A] does give some allowances to the staff in maternity, just to motivate them." (Supervisor, maternity wards)

Small night allowances were paid. Moreover, some practical incentives were appreciated:

"They pick us up when we are coming to work, and they provide us with tea, which is very helpful." (Nurse-midwife)

In hospital B, the Director said that he was trying to provide minimal incentives for nurses, such as tea and bread. A flat-rate extra duty allowance was paid to the staff, but he lacked funds for other incentives. The block grant funding that could be used for this type of incentives had just been cut by 30 per cent for that financial year. He recognised that

"The nurses need support, mentally and physically; they can't work around the clock." (Hospital Director)

The nurses confirmed the lack of other incentives:

"We work in a very difficult environment; we do not have any kind of incentives. We do not have night allowances; even extra duties allowance is not paid." (Nurse-midwife)

## DISCUSSION: THE SCOPE FOR EMPOWERING NURSES TO IMPROVE MATERNAL CARE

There is a small but telling anecdote from a woman who delivered in hospital A. She was already in labour on arriving at the hospital and was berated by a doctor for lying on the floor creating 'contamination' and for arriving late. However, she said that an older nurse came by and helped her to the delivery ward, saying to the critic, "You want to kill?" The reported assertiveness of the nurse suggests confidence in her role and skills.

There is little the management can do in either hospital to change the low salaries and long hours nor the recurrent crisis and pressure on busy labour wards with many emergencies. The health system in Tanzania struggles on very low resources indeed. Recent research recommends total per capita health spending of USD 54 to achieve a universal access to a minimum package including maternal care (WHO, 2010). Total Tanzanian spending was only USD 41 in 2013, of which just USD 16 was government spending.<sup>6</sup> Nevertheless, out of this, the government aims to fully fund maternal care free of charge in government facilities, a very demanding challenge. Both hospitals studied here relied largely on government funding, with a little retained income from other hospital user charges. However, hospital A had more financial autonomy and directly employed some of its own staff, which gave management somewhat more freedom of action.

<sup>6</sup>Data from WHO http://gamapserver.who.int/gho/interactive\_charts/mdg5\_mm/atlas.html

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Nurse-midwives often felt overwhelmed in both hospitals. Words such as 'struggling' recur constantly. The interviewees did not use concepts such as 'empowerment'. However, nurse-midwives and nurse managers in hospital A not only felt more supported but also that they felt they could influence their environment and outcomes more effectively than those in hospital B.

One indicator is supplies. Nurse-midwives were frustrated when essential supplies were unavailable, but hospital A's nurse-midwives perceived that management genuinely tried to address the problem, while hospital B staff did not. The maternity services manager in hospital A felt that the supplies were under her control and her responsibility. In hospital B, a maternity supervisor described trying hard to improve supplies—she had helped to identify a cheaper type of disinfectant to improve availability by reducing costs—but complained sharply of delays and poor quality items received.

A second indicator is medical support. In hospital A, nurse-midwives reported confidence in being able to call on medical support when needed; in hospital B, they did not. Both hospitals were currently run by obstetricians (in B, recently appointed) who were actively focused on improving maternal care, but hospital A had been more successful to date in terms of medical support. In hospital B, nurse-midwives' experience of failing to locate medical support when needed was disempowering. Hospital A appeared to have better communication across hierarchies.

Training and updating can also be empowering. While in both hospitals, nurses had been on short professional training courses, the most positive statement on training—both on the job and formal—was from a nurse-midwife in hospital A:

"The hospital recognizes and values the work I do. We get a lot of on-the-job training. I got my diploma while working in this hospital."

The hospital A nurse-midwives thus had more access to some empowering features listed by Kanter.

The discussion of incentives links to staff engagement and psychological empowerment. An indicator of low engagement among nurse-midwives was the rather passive attitude pervasive in hospital B towards the known problems of bribery and abusive behaviour. In hospital B, there was less focus by management on the problem and a level of cultural acceptance among staff of some abusive behaviour. This was not the case in hospital A, where managers rejected bribery and abuse as unacceptable and nurse-midwives stated that bribery did not occur.

The staff in hospital B therefore experienced not only more frustration and constraint but also less congruence between professional values, managers' behaviour, and the working culture they experienced on the wards. Nurse-midwives in both hospitals said that they sought to use their professional competence, and they all wished to be respected by patients and managers. None justified abuse or bribery as acceptable in principle. Nevertheless, nurse-midwives in hospital B were working in a context of psychological disempowerment or disengagement, with a larger gap between their professional principles and their day to day experience. Other aspects of psychological empowerment—self-determination, control, and ability to make an impact—were also all weaker in hospital B.

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Power and control may be used for good or ill, as the problems of informal payments illustrate, so empowerment must create a context that both enables nurses to deliver good quality health care and also constrains the misuse of power. Hospital A had established management processes that valued and promoted good professional behaviour, while succeeding in enforcing sanctions against inappropriate behaviour. While autonomy facilitates empowerment of professionals, tight rules and procedures are part of a well-balanced management approach to improving the performance of health workers (Marchal *et al.*, 2010), as the hospital A case study illustrates. Hospital A managers were supportive; yet, they were ready to sanction unprofessional conduct.

The effectiveness of management that emphasises support, congruence and capacity to act professionally in line with values, even in conditions of severe resource constraint, is supported by other studies. Mathauer and Imhoff (2006) found health workers indicated that much as they would have liked higher salaries, what they wanted most was availability of the means and materials to enable them to perform well professionally. Non-monetary incentives, such as promotion and career advancement, professional development, appreciation of managers and colleagues, and recognition, all influence health workers' performance (Dieleman and Hammeijer, 2008).

Some organisational constraints are beyond the capacity of facility management. Hospital A management had more financial flexibility to use fee income to address their priorities, and hospital B management probably had lower total funding. Furthermore, this study is limited in its scope. There may be other undocumented differences between the hospitals that also help to account for the differences observed in women's experiences of care. Nevertheless, the case study evidence presented shows that there are elements of empowering management that are within the capacity of maternal health care managers, to promote and sustain good quality care, even in very low resource environments.

#### CONCLUSION

There have been few studies of nurse empowerment in low-income African contexts. Nevertheless, given the central role of nurse-midwives in delivering and managing maternal care, and the known problems on labour wards, promoting nursemidwives' empowerment and engagement is potentially an important contributor to improving maternal care.

We have shown that disempowerment of nurse-midwives contributes to poor quality hospital maternal care as experienced by women giving birth in a Tanzanian hospital context. Nevertheless, even in severely resource-constrained environments, we have shown that there is room for management to empower staff to do better. Because the quality of maternal care is strongly linked to outcomes (Hunter *et al.*, 2008), our findings are relevant to the effort to improve maternal health outcomes and patient safety and confidence in maternal care.

Policy and management implications include the following. First, management training can impart knowledge and skills about supportive and participatory management and encourage more flexible and interactive management hierarchies.

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Second, while health worker shortages must be tackled nationally in Tanzania, there is a clear need also to rethink how the currently available qualified staff may be empowered to improve performance. Our case study confirms that low-cost incentives—both monetary and non-monetary—are within funding capacity, as is greater empowerment of nurse-midwives who act as supervisors and maternity managers.

Finally, the problem of supply shortages can interact with acts of bribery and abuse of patients, in a psychologically disempowering deterioration of maternity ward climate and culture. This can be tackled by empowering management processes, with potentially large benefits in better work engagement of nursemidwives and improved maternal care.

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