

Introduction

After two long days on the bus, I arrived in Sumbawanga in the beginning of February 2014, the rainy season well underway. The next day, I reported to the Mawingu Regional Hospital and stood up in front of the morning clinical meeting, with nearly one hundred hospital staff members staring back at me, to introduce myself and explain why I was there. I was proposing to research maternal death, a subject often accompanied by resonances of blame and failure on the part of individuals, institutions, and the state. I explained the goals of my research in a way that emphasized the need for the voices and perspectives of health care providers, those who were working hard to provide pregnant women with life-saving care during emergencies, despite many challenges, and who are so often overlooked as whole people, or are taken for granted, in the reams of protocols and technical guidelines that policy makers and public health practitioners continue to turn out.

In less than three weeks after my arrival, we saw five maternal deaths on the maternity ward, one of whom was Paulina, the woman whose story opens this book. Over the course of the following fifteen months at the hospital, I began to unravel the complex intersections of history, geography, regional identity, state policies, political economics, biomedicine, and institutional and individual goals for providing and receiving care as these factors all influenced maternal health and death in the Rukwa region. Life on the maternity ward of a regional referral hospital is fast-paced and high pressure. Not only are these wards often understaffed and lacking material resources for lifesaving obstetric and neonatal care, but the nurses and doctors must respond to, and implement, a seemingly endless parade of new protocols and procedures, evidence based and Ministry of Health supported. All the while, women's and babies' lives rest in the balance, caught between the moment of what might be—an uncomplicated birth—and what sometimes occurs—a quick, often silent, turn of events that leaves one or both dying.

A flurry of other activity constituted the background to Paulina's care on the day of her death. As she and Dr. Deo were in the operating theater fighting for her life, another woman came to the ward with a retained placenta. Even after a physician surgically removed the placenta, she continued to bleed heavily, still under the effects of the earlier general anesthesia and unable to call for help as blood pooled under her. Not twenty minutes later, another woman, Pascalia, started hemorrhaging after she gave birth. Nurse Rukia improvised a pair of elbow-length gynecology gloves (because the real ones were out of stock) and delved into Pascalia's uterus to manually remove the clots that were leading to the hemorrhaging. After she finished, Nurse Rukia had blood well up her arm, as well as where her makeshift elbow-length protection had given way; she was desperately calling for antiseptic to disinfect herself because of this blood contamination. Later that morning, relatives came to pick up a baby whose mother had died on the ward after giving birth the day before. In the afternoon, an eighteen-year-old woman arrived as a referral case from an outlying health center. She had started having seizures due to eclampsia from pregnancy-induced high blood pressure. Shortly thereafter, Nurse Lucy came back to the ward to deliver the news of Paulina's death in the operating theater.

As all of these emergencies unfolded, the nurses and doctors did their best to save lives and prevent other problems. In the aftermath of the death of any mother or baby, there was also a significant amount of paperwork. However, in the deluge of deaths that occurred during such a short three-week period, files went missing, and providers and administrators forgot details or were unable to follow up on a case as they might have wished. The resulting data that passed through the hospital, to the regional level and up to the Ministry of Health, were partial at best and hardly a reflection of the lives, the professional challenges, and the ethical and moral negotiations that went into each woman's care. Looking at the professional challenges and negotiations in the provision and reception of care that never made it into the reported data serves to pull back the curtain on the professionals who were supposed to prevent maternal deaths. Through these incidents, it is possible to see a workforce that is at once the cornerstone of the political and ideological humanitarian goal of reducing maternal mortality and also the invisible, taken-for-granted element in every facility-based birth—the nurse-midwives and doctors of the maternity service. As Nurse Aneth so aptly stated,

The maternity ward is the mirror of the hospital. . . . I mean, you will find that in any hospital, a person will ask how is it, how is the language on the maternity ward? How is the care on the maternity ward? How is the drug supply on the maternity ward? How are the deaths on maternity? I mean, it's necessary. A person, if they reach any hospital, the person can be just passing, but they will say they are interested in knowing about the maternity ward. . . . I think it is a sensitive department because it is the workshop, the factory for bringing people into the world after asking God for them.

The negotiations the health care workers lived out on this ward serve, too, as a window not just onto the hospital but onto Tanzania's health care system more generally, as well as onto a global assemblage of institutions, bureaucracies, policies, and power that constitute the regimes of global health. Because of the complicated and unpredictable nature of obstetric emergencies, maternal death is a particularly sensitive indicator that quickly lays bare many health system gaps and weaknesses, making it a useful lens for examining the functioning of health systems but also individual biomedical institutions.¹ Attending to the complexity of this work, especially the moral and ethical complexities that the nurses and doctors navigated each day, holds profound implications for our understanding of how facility-based maternity care is not the straightforward panacea for maternal death the global community imagines it to be.

As much as this book is about complexity—in work, in bodies, in institutions, in realities—it is also, first and foremost, about practices and ethics of care, both technical/clinical care and affective/emotional care. Particularly within health care settings, the word *care* appears in many different contexts. Before moving into a more in-depth discussion of care, we need to differentiate between technical care (which I also refer to as clinical care) and the less bounded affective forms of caring. Technical care is what we are referring to when we say health *care* services. This category includes procedures and tests, medication, surgeries, and monitoring of urine output, blood pressure, or fetal heart rates, among many other indicators. Health care workers have undergone training to be able to conduct these procedures or engage in these processes. Affective care, on the other hand, is a much fuzzier concept encompassing emotional engagement between patients and providers and responses to bodily but also mental and emotional needs; fundamentally, it is an intersubjective relationship.

In the obvious ways one might expect with a hospital ethnography, this book is about how health care providers, working in environments characterized by scarcity, care for their patients or fail to be able to do so. This book also tells how institutions may or may not be capable of caring for patients and for staff members because they are also sites, or conduits, of myriad forms of violence—ranging from the physical to the structural. Too, these pages are about relatives and communities caring for pregnant women and how these groups understand maternal deaths or obstetric emergencies through their interactions with health care at a regional hospital but also closer to home, in village dispensaries. It is about how these people in communities are wounded by their interactions with their health care system through remembered and current incidents of corruption and exclusion. This book is also about how health care providers sought to care for each other through informal modes of accountability that protected them professionally (both within and outside their institution of employment). At the same time, sometimes these affective care acts for colleagues hid clinical

mistakes, and the hiding challenged health care workers' personal, private morals and the professional ethics they believed to underpin good care. These ethical and moral challenges, the afterlives of informal accountability or other care acts between colleagues, escaped official documentation and visibility. But these care acts often helped hospital staff members reconcile their clinical and social actions with the burden of deaths that occurred on their watch. Ultimately, in far too many instances, bureaucratic, institutional, and social dynamics of the maternity ward, the hospital generally, and the overall health care system came together in ways that worked against a woman and contributed to the deterioration of her condition and her subsequent death, obstructing individual providers and state efforts to further reduce maternal mortality. The book also tracks maternal deaths and their roots outside hospitals, in communities, but also in historical precedents, in the world of funding and of material and human resources, and in global movements (or the lack thereof). However, "To understand these persistent patterns, one must look back to the period when the path was embarked upon, when the institutions were first constructed."² This is the task to which I now turn before coming back to care and this specific hospital.

THE PROBLEM OF MATERNAL MORTALITY

The problem of maternal mortality came of age alongside, and hand in hand with, a global expansion of data collection and disease surveillance. A confluence of contemporary currents of change and much older tides of interest launched the Safe Motherhood Initiative in Nairobi in 1987. Quietly, often in the background, colonial and postcolonial powers throughout Africa, and globally, had been debating the best ways to provide health care services for pregnant women when the time came for them to give birth. In British-controlled Tanganyika, present-day Tanzania, this meant years of memos back and forth arguing for or against institutional (hospital) and domiciliary (home) birth.³ The ultimate question always was and continues to be: Where is the best place for women to give birth, not only for their own health, but also to accomplish state goals? These state goals have taken various forms, shifting from educating or "modernizing" "Native" women in colonial-era Tanganyika so they might raise a certain, imagined type of ideal colonial subject, to achieving the Millennium Development and now Sustainable Development Goals in the present moment.⁴ With each new idea, with each policy oscillation between these poles of home and hospital, came new financial, bureaucratic, and medical implications for infrastructure, human resources, and experiences of caring for and being cared for. Maternal health, and reproduction more generally, can never be extricated from state making and perpetuation.

Throughout the 1970s and early 1980s, as data collection methods improved, and as second-wave feminism in the US and Europe influenced researchers and policy makers to look more closely at so-called women's issues, the global extent

of the burden of maternal death began to come into view. Within maternal health, the current focus on data collection and utilization extends back to this period and continues to be both challenge and goal.⁵ Systematic definitions of maternal death, as well as greater understanding of the primary causes of these deaths, initially resulted from this time period. On the basis of this work, the World Health Organization (WHO) now defines maternal mortality as “the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes,” and it adds, “To facilitate the identification of maternal deaths in circumstances in which cause of death attribution is inadequate, a new category has been introduced: Pregnancy-related death is defined as the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the cause of death.”⁶ Additionally, the WHO divides the causes of maternal mortality into direct and indirect causes. The direct causes are clinical conditions responsible for the majority of maternal deaths worldwide and include hemorrhage, complications from abortion (or attempted abortion), hypertensive diseases (such as eclampsia and preeclampsia), sepsis/infection, and obstructed labor.⁷ Pregnancy exacerbates some underlying health conditions, such as diabetes, HIV, malaria, obesity, or heart problems, leading to indirect maternal deaths.⁸

In 1985, two public health researchers, Allan Rosenfield and Deborah Maine, asked the world why maternal health was being neglected in widespread maternal-child health programs of the period; they reiterated findings from 1979 that more than half a million women were dying every year of pregnancy-related causes.⁹ This number, and the lack of attention for maternal health, shocked the global community and catalyzed a host of new organizations and initiatives, as well as a wave of policy priority setting. This historical moment gave birth to the Safe Motherhood Initiative and its Inter-Agency Group, a bricolage of organizations with sometimes-disparate interests, all loosely aligned around the goals of reducing these largely preventable deaths of women.¹⁰ Together, this group of organizations suggested a variety of interventions to reduce maternal deaths, all the while supporting more research into their causes, and into the more removed contributors to the deaths of pregnant women, such as low levels of education or a perceived lack of women’s empowerment or low status in their communities. But globally, the complex, radically inclusive and systemic approaches needed to reduce maternal deaths still received less support than child survival programs.¹¹

Concurrently, as the global Safe Motherhood Initiative was building momentum, the world was facing economic challenges, most severely felt in lower-income countries. The 1980s were a time of drastic change for many nations in sub-Saharan Africa and globally as they tried to right their economies after the tumultuous 1970s had resulted in the collapse of global markets for the raw goods on which these economies depended.¹² In Tanzania, home to Paulina and the setting of the events

to follow, the country's first president, Julius Nyerere, was forced to step down under mounting pressure from within his own party to abandon his unique approach to African socialism, Ujamaa socialism. Tanzania's nine-month military conflict with Uganda resulted in the fall of the brutal dictator Idi Amin but also diverted considerable resources from other national activities. Faced with the realization that *kujitegemea*, or self-reliance, was no longer a viable strategy if he wanted to see his country's economy survive, but too committed to his ideological promises to the country some twenty years before to accept broad outside assistance, Nyerere stepped aside in 1985.¹³ The country's second president, Ali Hassan Mwinyi, immediately accepted loans from the International Monetary Fund (IMF) and the World Bank and, as a condition of these loans, implemented broad-sweeping reforms as part of the required Structural Adjustment Program (SAP).¹⁴

Just as many countries were cutting funds for social programs, including health care services—a move required by the SAPs as a condition for receiving aid—the global community was entreating low-income countries to commit to broad (and vague) campaigns to increase access to primary care and improve maternal health after the 1978 Alma Ata Conference called on governments to ensure citizens' access to health care and health through primary care.¹⁵ Structural adjustment in Tanzania also produced reduced wages for health care providers, exacerbating a general decline in living conditions and social service provision during the 1980s and early 1990s.¹⁶ The longer-term effect was an increase in corruption, which proliferated rapidly and soon took firm root in the health sector in the late 1980s.¹⁷ Structural adjustment only worsened the financing problem for the Tanzanian health sector, which foreign aid had long kept afloat.¹⁸ In 1996, Tanzania decentralized the health care system, shifting the burden to the local level, where inequitable distribution of wealth and resources resulted in growing health rifts between regions.¹⁹ Around the same time, the country implemented user fees, which attempted to transfer some of the financial burden of services onto patients.²⁰ However, user fees prevented many pregnant women from accessing needed services, and soon they, and select other groups, were exempted from fees thereafter. Where, then, were the funds to accomplish these primary health and Safe Motherhood goals meant to come from? And, crucially for the story that follows, who was imagined to be implementing these new forms of care and expanding services far and wide?

Tanzania's commitment to its socialist experiment meant that the primary care message of Alma Ata neatly aligned with the country's egalitarian socialist goals to ensure that Tanzanian citizens had access to basic health care, provided in Ujamaa villages via small dispensaries, which continue to form the basis of the country's health care system.²¹ By this time, Tanzania had been struggling for nearly two decades as an independent nation to provide health care services to the local population. A focus on primary care drew resources and investment away from larger facilities, such as hospitals, and resulted in increasing supply shortages and

overcrowding.²² Despite these challenges, Tanzania was one of the first countries to sign on to the Safe Motherhood Initiative as a show of support for the initiative's direction and goals. This commitment built on the foundation the Ministry of Health had established in 1974 when it launched the first coordinated maternal health services in the country and formed a dedicated maternal health unit in the ministry.²³ In 1988 the Ministry of Health produced Tanzania's inaugural comprehensive national health policy, the first objective of which was to reduce maternal and infant morbidity and mortality.²⁴

Initially, faced with a global shortage of funds, infrastructure, and personnel, the Safe Motherhood Initiative advocated increasing access to antenatal care and training so-called traditional birth attendants (TBAs) as two ways to improve maternal health outcomes using already-present resources and in keeping with primary care objectives. Public health experts imagined antenatal care as a low-cost way to identify the women most at risk of developing an obstetric complication. Training TBAs—the name for people (mostly women) already acting as midwives in local communities, providing assistance to women in their homes—was another way to capitalize on existing resources. By training these women to use sanitary methods and recognize complications necessitating referral, public health professionals imagined that TBAs would be able to help reduce maternal deaths due to causes such as infection or obstructed labor. As it so happened, with more training, TBAs maintained, and even improved, their respected status in their communities, and more women utilized their close-to-home services. Particularly when biomedical services were poorly supported or low quality, women and their family members often chose the care of local healers and TBAs instead, reasoning that such care would cost less than the hospital and might be more effective, socially appropriate, and dignified.²⁵ Conflicts between local beliefs and the practices of biomedicine were also an important factor affecting women's decisions regarding the use of biomedical health care services.²⁶ Thus the original goal of TBAs referring more women to biomedical care was subverted, and women continued staying at home to give birth. Much like training TBAs, expanding antenatal care did not go as planned; as it turns out, it is an extraordinarily ineffective route for identifying women who will develop obstetric emergencies while giving birth or in the postpartum period.²⁷ Like Paulina, many healthy women unexpectedly experience complications, and others with a lifetime of health problems can manage to give birth without issue.

If these two approaches—providing TBA care at home and referring women only when home-based care was not an option and increasing antenatal care to identify problems—were failing, what then was the solution to preventing the deaths of pregnant women?²⁸ As the global policy pendulum once again swung the opposite direction, the undeniable answer seemed to be that all women should give birth with the assistance of a skilled birth attendant in a biomedical health facility equipped with all necessary lifesaving supplies. Yet women's perspectives

and ideas about where *they* would like to give birth were often left out of these policy-level debates, historically and in the present day. Giving birth at home has often been about giving birth in a familiar environment surrounded by people deemed socially appropriate. In contrast, biomedical health facilities are unfamiliar, hyperspecialized spaces constrained by the norms and rules of such institutions and facilitated by the knowledge, technology, and tools of their staff members. The unfamiliarity of this environment can, in many cases, amplify women's experiences of uncertainty during this life moment. Pregnancy and birth are already liminal states, marking important social life transitions, solidifying (when all goes well) a woman's place in her marital home, and fulfilling strong pronatalist cultural expectations. This period is also a fraught time, the success of which is threatened by both biomedical and supernatural forces that can steal away a woman, cornerstone of a family and community, and/or a baby, the promise of a new generation.

In the end, skilled attendance at birth came to be the linchpin of programming in the new era.²⁹ The WHO defines a skilled attendant as "an accredited health professional . . . 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," essentially what is now called basic emergency obstetric and neonatal care (BEmONC).³⁰ While the WHO makes this definition sound clear-cut, significant gray area exists. If a nurse went to school and was present in classrooms and during clinical rotations related to maternity care but cannot actually describe the signs of eclampsia when asked, is she skilled or unskilled? Technically, she would be grouped with skilled providers because she has a diploma, but functionally she is incompletely capable of providing emergency obstetric care. Alternatively, I have met TBAs, *wakunga wa jadi* in Swahili, who have no formal training but are able to cogently describe procedures for dealing with complications such as retained placenta in a way that many low-level, newly graduated enrolled nurses working in village dispensaries cannot. Who, then, is truly skilled, and do skills or papers (i.e., diplomas and certificates) matter more? This fundamental tension underpins much of what follows in this book. The biomedical institution itself cannot reduce maternal death; something more complex is at play in these places that challenges this clinical reductionism and complicates perceptions and beliefs about how to best prevent the deaths of pregnant women.

It was around this time, 2000, that the global community adopted the Millennium Development Goals (MDGs), a set of eight goals to reduce poverty and improve health. MDG 5 was to reduce maternal deaths by three-quarters from the 1990 level by the year 2015.³¹ In addition to structuring health sector priorities in many countries, the Millennium Development Goals helped to usher in an era in which indicators and metrics became a measure for the success, legitimacy, and validity of states and a marker of good governance from the local to the global

level. For low- and low-middle-income countries such as Tanzania, evident progress toward meeting the MDGs became an important component of demonstrating deservingness for aid and investment, both from donor countries and from international organizations.

Only nine countries globally were able to achieve MDG 5 by the 2015 endpoint; many others failed to make significant progress.³² Across sub-Saharan Africa, home to fully two-thirds of these deaths, women still have a 1 in 45 lifetime chance of dying from pregnancy-related causes.³³ In Tanzania, as the country attempted to reach these goals, they accepted support and interventions from numerous outside agencies, governmental and nongovernmental alike, resulting in the unstable “projectification”—reliance on shifting donors and policies—of the health sector,³⁴ as opposed to comprehensive, synchronized efforts at reform and improvement across various areas of health services. For MDG 5 in the country, there is little evidence to suggest that the millions of dollars and scores of interventions poured into achieving this target have resulted in any sustained change. For example, as of 2016, Tanzania’s maternal mortality ratio (MMR) was estimated at 556 per 100,000 live births,³⁵ lower than the estimate for the period 2000–2005 but higher than estimates from 2010 and 2012. Thus, as the Demographic and Health Survey states, “There is no evidence to conclude that the MMR has changed substantially over the last decade.”³⁶ Likewise, the Ministry of Health’s website from 2018 says, “The maternal mortality ratio for births within institutions is not declining.”³⁷ Tanzania has demonstrated strong and consistent political commitment to addressing reproductive and maternal health problems. But unfocused efforts to improve care, lacking consistency and singularity of purpose, not to mention the needed financial and human resources, have long delayed further improvements for maternal health in Tanzania and mirror the troubled trajectory of the Safe Motherhood Initiative itself.³⁸ After 2015, the Sustainable Development Goals (SDGs) replaced the MDGs, and a human rights framework now unifies seventeen comprehensive target areas, including reducing the global maternal mortality ratio to less than 70 deaths per 100,000 live births by 2030.³⁹

With the growth of research, guidelines, policies, and programs designed to help countries achieve lower maternal mortality has come rapid growth of bureaucracy. Anthropologist Matthew Kohrman uses the term *biobureaucracy* to describe the growth of institutions that have emerged with the “conceptual and practical orientation of advancing the health and well-being of people understood to have bodies which are either damaged, sickly, or otherwise different, based on local or translocal norms of existence”;⁴⁰ biomedicine and its worldview are intrinsically linked to the expansion of bureaucratic institutions.⁴¹ In the case of maternal health, these “otherwise different” bodies are those for which pregnancy, labor, and delivery do not proceed problem-free. Though colonial efforts to increase birth-rates and medicalize pregnancy “became enmeshed in the growth of bureaucratic state forms and *la paperasserie* of colonized life,” the post-Safe Motherhood era

has facilitated the birth of enormous global entities to reduce the most abnormal outcome (death) of one of life's most normal processes (reproduction).⁴²

With biobureaucratic expansion has come an increase in modes of accounting for and measuring health.⁴³ Despite this link with calls for greater (fiscal) accountability, various actors fabricate data for a variety of reasons and manipulate records of care, treatments, or diagnoses to correspond with expected outcomes.⁴⁴ In many lower-income countries, the data on MMRs continue to be rough estimates generated through sophisticated statistical analysis.⁴⁵ The nurses, doctors, and health administrators at Mawingu Regional Hospital grappled daily with increasing demands for data collection, preservation, and transmission. Their struggles to meet these demands illustrate the unintended effects of this global health fixation on numbers as it draws workers away from person-to-person caring.

Hospitals such as Mawingu are ground zero for the struggle to reduce deaths. Though more and more pregnant women arrive at this hospital with the expectation of receiving high-quality care, the number of deaths at the hospital has not declined, despite years of efforts to increase the number of highly trained providers, improve the availability of supplies, and implement all the Ministry of Health–approved and internationally sanctioned protocols, procedures, and plans. Despite clear evidence about the clinical causes of maternal death (hemorrhage, hypertensive conditions, infections) and the upstream contributors (low levels of education, poverty), why does maternal mortality remain such a seemingly intractable problem in Tanzania, and much of sub-Saharan Africa? What else can help to explain the slow progress toward this goal and all the failed interventions littering the road?

Within the field of medical anthropology, scholars have, since the 1970s, sought to explain why women continue to die during childbirth. Most commonly, these efforts have been based in understanding women's lifeworlds and rooted in explorations of women's perspectives and experiences with care seeking. Researchers have done the important work of aligning themselves with women and communities, often the more marginalized groups. Rarely, however, have these inquiries sought, or been able, to follow women into the very biomedical facilities now positioned by global policy as *the* route to saving women's lives. Yet the central debate about the appropriate place for women to give birth resounds in many of these earlier works.⁴⁶ The fact of the matter is that if we examine only communities or only biomedical facilities we will not be able to adequately explain how and why women continue to die during pregnancy and while giving birth. Both anthropologists and public health researchers have thoroughly documented the community-level contributors. Now it is time to turn the anthropological lens on the biomedical facilities, where community meets specialized professionals.

Before reaching the specialized space of Mawingu Regional Referral Hospital, women most often pass through the other levels of the referral chain, starting with the local village dispensaries, which address basic, uncomplicated health needs. From there, a woman might seek more advanced care at a health center, usually