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Policy, paperwork and 'postographs': Global indicators and maternity care documentation in rural Burkina Faso

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ABSTRACT

Targets and indicators set at the global level are powerful tools that govern health systems in low-income countries. Skilled birth attendance at a health facility is an important indicator for monitoring maternal mortality reduction worldwide. This paper examines how health workers negotiate policy implementation through the translation of clinical care into registries and reports. It does so by analysing the links between the global policy of institutional births and the role of documentation in the provision of birth care in primary health centres in Burkina Faso. Observations of health workers' practices in four primary maternity units (one urban, one semi-urban and two rural) conducted over a 12-week period in 2011–2012 are analysed alongside 14 in-depth interviews with midwives and other health workers. The findings uncover the magnitude of reporting demands that health workers experience and the pressure placed on them to provide the 'right' results, in line with global policy objectives. The paper describes the way in which they document inaccurate accounts, for example by completing the labour surveillance tool partograph after birth, thus transforming it into a 'postograph', to adhere to the expectations of health district officers. We argue that the drive for the 'right' numbers might encourage inaccurate reporting practices and it can feed into policies that are incapable of addressing the realities experienced by frontline health workers and patients. The focus on producing indicators of good care can divert attention from actual care, with profound implications for accountability at the health centre level.

1. Introduction

Despite decades of international attention, maternal mortality remains a major problem, especially in Sub-Saharan Africa. More than 300,000 women died from pregnancy-related complications in 2015, most of them living in low-income settings (Alkema et al., 2016). The majority of maternal deaths are avoidable because the direct causes of maternal deaths, and the medical interventions to prevent and treat these are well known (Ronsmans and Graham, 2006). Ensuring that all women have access to safe abortions as well as quality care at and around the time they give birth are essential for reducing maternal morbidity and mortality (Campbell et al., 2016). Because maternal mortality is inherently difficult to estimate in countries without reliable civil registration systems, skilled birth attendance has become an important proxy indicator for maternal mortality (Storeng and Béhague, 2017; Wendland, 2016). Skilled birth attendance is assured by a healthcare provider with midwifery skills who is trained in the management of normal deliveries and the detection and management of complications during birth, and who has the ability to refer to a higher level of care when needed (World Health Organisation, 2004). In most countries, women giving birth in healthcare institutions are considered to be provided with skilled attendance, although this is based on the sometimes questionable assumption of sufficiently trainined health workers and well-functioning referral systems (Campbell et al., 2016).

Since the launch of the Safe Motherhood Initiative in 1987, the global community has fostered a number of initiatives, policies and goals. Over the past decades, global efforts to reduce maternal mortality have been channelled through the Millennium Development Goal

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(MDG) 5 (2000–2015) and, after 2015, through the Sustainable Development Goal (SDG) 3.1, targeting maternal mortality reduction. These global initiatives have mobilised attention and funds. At the same time, they have narrowed the field of reproductive health and influenced national health system through a myopic focus on averting maternal *mortality* – rather than improving maternal *health* – in policies and interventions (Austveg, 2011; Roalkvam and McNeill, 2016; Storeng and Béhague, 2014).

Policies promoted in the field of maternal healthcare are often highly standardised, and they constitute what Olivier de Sardan et al. (2017) refer to as travelling models to be realised in the same format in many countries. The policy texts are presented as culturally neutral and they are expected to be implemented by frontline workers in healthcare institutions with great geographical, economic, political and cultural diversity (Blystad et al., 2010; Olivier de Sardan et al., 2017; Smith, 2001).

Global policy targets are powerful, and they can alter and incentivise nation states, health systems and women giving birth in several ways (Danielsen, 2017; Oni-Orisan, 2016; Roalkvam and McNeill, 2016; Storeng and Béhague, 2014). The global policy level is multifaceted with possible policy dynamics between various actors at different levels; it is far from being a permanent entity with well-defined actors, beneficiaries, mandates and ways of working (Ferguson and Gupta, 2002). The way in which policies formulated in the so-called global sphere are translated into country-level programmes is determined by the power of global actors and national governments. A country's degree of discretionary power over policy adoption is reliant upon its level of donor dependency, the functioning of its civil society and the availability of healthcare expertise (Sandberg and Justice, 2013).

In many settings, the successful implementation of policies addressing maternal mortality becomes a prerequisite for the nature of external financing and governance of weak health systems (Oni-Orisan, 2016; Storeng and Béhague, 2014). Development assistance partners tend to influence priority setting at all stages of the policy process including in the development of national and lower level policies, and in the monitoring and evaluation of their implementation where key indicators are used to measure the success or failure of policies and programmes (Khan et al., 2018). In a context where maternal mortality constitutes an important measure of social development and women's status, skilled attendance at birth also becomes an indicator of the success of the state vis-à-vis the international community, and it is often used to compare the performance of countries and regions (Oni-Orisan, 2016). These measurements can be helpful in monitoring progress, and policymakers and governments alike view them as a tool to stimulate improvements in maternal healthcare and, thereby, justify donors' investments (Storeng and Béhague, 2017).

The attention to targets might influence health workers' practices and sense of accountability within health systems (Coutinho et al., 2000). Strong performance accountability, which Brinkerhoff (2004, p. 374) defines as 'demonstrating and accounting for performance in view of agreed-upon performance targets', can modify the internal accountability between health workers and their superiors (George, 2009). Performance accountability can also modify the external accountability between health workers and women in need of birth care (Roalkvam and McNeill, 2016).

Health centres, as primary health care units constitute the interface between global technical norms around birth care, patients' practices and understandings, and health workers' actions influenced by professional and organisational factors (Jaffré and Suh, 2016). Frontline health workers provide services to the population within the framework of government policy, but with the ability to mould these policies through their discretion over which services are offered, how they are offered and the benefits and sanctions allocated to patients (Lipsky, 1980; Suh, 2014). As civil servants at the lowest level of government, and in direct contact with the general population, Lipsky (1980) refers to them as 'street-level bureaucrats'. Implementation and adherence to policy by front line health workers is negotiated through written registries and reports (Hull, 2012). One example of this is how Burkinabè health workers complete the partograph intended for labour surveillance after birth, thus transforming it into a 'postograph', to demonstrate bureaucratic compliance (Ridde et al., 2017). Therefore, an analysis of health workers' actions and inaction with regard to documentation practices is key to understanding policy implementation, especially in resource-deprived areas (Erasmus, 2014; Kaler and Watkins, 2001; Walker and Gilson, 2004).

The articulations between standardised policies, local healthcare systems and local health workers at the point of service delivery remain poorly understood (Olivier de Sardan et al., 2017). By examining the interfaces between policy and practice (Jaffré and Suh, 2016), this study aims to shed light on the links between the global policy of skilled birth attendance and the provision of birth care in health care facilities. The study is set in primary health centres in rural Burkina Faso, which struggle with high levels of maternal mortality and a donor-dependent healthcare system. We argue that the magnitude of reporting linked with global policies is burdensome and time consuming for health workers, and can compromise quality of care. In addition, the pressure to achieve measurable progress at the health centre level encourages inaccurate reporting practices among health workers. On an aggregate level this produces incorrect statistics on skilled attendance, which in turn feeds into inaccurate policies that do not serve the interests of women in need of pregnancy and birth care.

2. Methods

2.1. Study setting

Burkina Faso, a former French colony situated landlocked in West Africa, is among the world's poorest countries. It was ranked 183 out of 187 on the 2012 Human Development Index with over 40% of its population living below the poverty line (United Nations Development Programme, 2011). Maternal mortality remains high; in 2013 the estimated maternal mortality ratio was 400 per 100 000 live births (Kassebaum et al., 2013). In 2014, the health expenditure per capita was 82 international USD, which corresponds to 5% of the gross domestic product (GDP) (Word Health Organization, 2018). About one-fourth of the country's national health budget in 2009 was financed by external donors and channelled through the Programme d'Appui du Développement Sanitaire (Ministère de la Santé).

The Burkinabè healthcare system consists of four levels of health facilities in which the health centre (Centre de Santé et de Promotion Sociale) is the most basic unit responsible for the provision of preventive and curative primary healthcare services (Ministère de la Santé, 2011). Other facilities include district, regional and university hospitals. At the time of the current study 13 regional health directorates, divided into 67 health districts organised the country's 1443 primary health centres. Official health data is compiled in monthly reports developed at the health facilities consolidated into tri-annual reports by health districts and regional health directorates (Direction Générale de l'Informaion et des Statistiques Sanitaires, 2012). In accordance with the decentralised structure of the Burkinabè healthcare system, annual action plans are developed at every level (facility, district, region) based on the data reported. National level policies, such as the ten-year National Sanitary Development Plan and the Plan to Accelerate the Reduction of Maternal and Neonatal Mortality, are integrated into these action plans.

Facility-based or institutional delivery care has been the core national strategy to reduce maternal mortality in line with the MDG 5 target. To achieve this aim, the Ministry of Health set an ambitious goal of increasing the proportion of women giving birth with skilled attendance from 50% to 80% between 2006 and 2015 and to provide Basic Emergency Obstetric and Neonatal Care (BEmONC) in 80% of the

country's primary care facilities (Ministère de la Santé, 2006a). At the same time, the government implemented a policy to subsidise user fees for pregnancy and delivery (Ministère de la Santé, 2006b; Ridde et al., 2011) to reduce financial barriers and protect healthcare users against catastrophic healthcare expenditures (Storeng et al., 2008). Despite the country's policies to increase attendance, Burkinabè health centres and hospitals continue to be characterised by low quality birth care with a continuous lack of material resources and skilled staff (Duysburgh et al., 2013; Kouanda et al., 2016; Melberg et al., 2016a).

The current study was an exploratory follow-up to a breastfeeding promotion trial conducted in the health districts of Banfora and Mangodara, which revealed high levels of perinatal mortality with no significant difference in mortality between facility births and home births (Diallo et al., 2010). The study therefore set out to explore the quality of institutional birth care in health centres in the trial area (Melberg et al., 2016a). Documentation of care was not an initial study objective, but emerged as a crucial part of the everyday work of the birth care providers already after the first weeks of observation and interviews. As the fieldwork proceeded, the ways in which health workers' practices were negotiated through written texts, such as patient charts and reports, was gradually given more attention during the observations, in informal conversations with health workers and in formal interviews.

The districts of Banfora and Mangodara are located in the Cascades region in the southwestern part of Burkina Faso and are two of the more economically well-off and fertile districts in the country (Institut national de la statistique et de la démographie, 2010). Like elsewhere in Burkina Faso, cotton production, subsistence farming and animal husbandry constitute the main economic activities. The town of Banfora is the centre of the country's sugar cane industry, and in 2006 its population was approximately 75,000. Literacy in the study districts is low and in 2008 83% of pregnant women have never attended school (Diallo et al., 2011). Although the official language is French, the main spoken language is Dioula.

In 2011 the combined population of these two study districts was approximately 500,000 and the annual number of expected deliveries was 24,500 (Diréction Générale de l'Information et des Statistiques Sanitaires, 2012). The 39 primary health centres in the two districts were served by one regional hospital in the city of Banfora. In 2011, about 67% of the deliveries in both districts were institutional deliveries in comparison to the national average of 78% (Diréction Générale de l'Information et des Statistiques Sanitaires, 2012). According to official Ministry of Health data, the reported maternal deaths of the Cascades region (comprised of the three health districts Banfora, Mangodara and Sindou) was 182 per 100 000 live births compared to the national average of 128 per 100 000 live births. In the health district of Banfora, like the country as a whole, 27% of the population resided more than 10 km from the nearest health centre; in contrast, in the health district of Mangodara, over 60% of the population resided over 10 km from the nearest health centre.

2.2. A study of four health centres

Qualitative data were collected from September 2011 to January 2012 in four primary health centres in the Banfora and Mangodara health districts. Considering the difference between urban and rural health centres and the monthly number of births, one urban, one semi-urban and two rural facilities were purposively selected to achieve maximum diversity. According to health district data, the selected health centres had between 250 and 1500 births per year, and an assisted delivery rate varying from 48% to 77%. The health centres varied in size and in level of infrastructure. They had from 2 to 12 health workers, and half of the centres had electricity and running water. Three of the health centres were situated in the Banfora health district. The two rural health centres were relatively large units situated approximately 65 km from the city of Banfora. No smaller rural health centres were chosen due to practical concerns, such as the availability of housing and transport for the researchers during the data collection process.

The first author who was a third-year medical student at the time the data was collected, conducted the observations, for three weeks in each of the four primary maternity units. This resulted in a total of 12 weeks of observations. She was present at the health centres every day, and also attended14 night shifts. The observations were non-structured; the researcher followed the healthcare providers at work, asking questions and helping out with small tasks, such a getting the necessary drugs and equipment ready. The first author's young age and background as a medical student seemed to facilitate her role as an observer in the health centres which involved being present in the ward and asking questions, but not providing direct patient care. The researcher recorded the observations and reflections in a field diary on a daily basis. In all the four study health centres she went through the available antenatal care-, birth- and referral registries for the past 5 years focusing on what was documented, the completeness of the information provided and, and how well-kept the registries were.

The observations were supplemented by 10 in-depth interviews with birth care providers in the four study health centres. Two to three providers were purposely selected in each study site on the basis of observed clinical- and documentation practices and their levels of experience and training. In addition two interviews were conducted with providers recruited from small rural health centres where, for practical reasons, observations could not be carried out. The altogether twelve interviewees all provided pregnancy and birth care, and included two registered midwives, three registered nurses, one enrolled midwife, four auxiliary midwives and two outreach health workers. In addition two medical doctors who were members of the health districts' management teams, were interviewed. The semi-structured interview guide explored issues, such as quality of care, working conditions and the role of documentation [insert link to online file A]. The interview guide was piloted for its suitability in healthcare facilities that were not part of the study, and it was modified based on the themes that emerged during data collection. All of the interviews were conducted in French in a separate room at the interviewees' workplace and lasted from 45 to 90 min. They were recorded with the informants' consent, and then transcribed verbatim.

2.3. Data analysis

During fieldwork, regular reading of the field notes and the interview transcripts allowed a preliminary analysis that informed further data collection. The analysis continued after the data collection was completed, when the transcripts were examined by drawing upon qualitative content analysis (Graneheim and Lundman, 2004). After re-familiarisation with the entire dataset, initial codes were identified in the interviews. These codes were first grouped into categories and then into themes. During the writing process, the themes were repeatedly assessed and refined by going back to the original dataset. Finally, the themes were narrated and representative quotes were identified.

2.4. Ethical considerations

The study was approved by the National Health Research Ethics Committee of the Ministry of Health, Ouagadougou, Burkina Faso (Comité d'Ethique pour la Recherche en Santé) and the Regional Committe of Medical and Health Research Ethics of Western Norway. Written informed consent was obtained from all of the interviewees. The health workers gave their verbal consent to the observations and to participating in the care practices, and they were asked to inform all their patients about the observations and ask for their consent to allow the researcher to be present.

3. Results

3.1. The magnitude of reporting

Health workers in southwestern Burkina Faso spent a vast proportion of their time and assigned a great deal of importance to documentation and reporting. After every patient consultation which normally took a few minutes, the workers spent at least the same amount of time documenting the care they provided in paper registries and forms. The time health workers spent on documenting their care necessarily diverted time away from actual care practices. In all the four health centres in this study, two health workers conducted the antenatal consultations. While one of them consulted and examined the woman, the other would sit at the desk and manually filling out the woman's antenatal card, the antenatal care registry, the registry of immunisation and the HIV-testing registry. Many of the forms requested that the same or very similar information be documented repeatedly, such as blood pressure, weight, fundal height and HIV status. Similarly, during or after every delivery, at least five registries were completed: the antenatal card, the antenatal registry, the birth registry, the partograph and the subsidy reimbursement cards.

In addition to the information registered during and after patient interactions, the health workers summarised the number of visits and the services provided in monthly paper-based reports that were submitted to the health district. The monthly report (Rapports Mensuels d'Acitivités) of the maternity ward was written by the head midwife or an auxiliary midwife, and later integrated into the health centre report by the chief nurse. The production of these reports required detailed information about the services provided. The monthly report provided information about the total number of births, the number of assisted home births, the number of non-assisted home births, the number of normal facility births, the number of complicated facility births, the number of twins and triplets born, the number of stillborn babies for each of the categories above, the number of children born weighing less than 2500 g, the number of premature babies born, the number of obstetrical interventions, the number of women referred before, during or after birth, the number of maternal deaths and their causes, the number of stillborn babies and the associated causes and the number of hospitalisation days in the maternity after birth and for other causes. Antenatal care, postnatal care, family planning activities, immunizations and other well-baby clinic activities were also summarised with a number of indicators. The production of the reports was time-consuming as the maternity head collected the information by manually going through different registries, such as the immunisation registry, the antenatal care registry, the birth registry, the abortion registry, the family planning registry, the referral registry and the well-baby registry. In two of the larger centres, the midwives in charge of the maternity ward were observed to withdraw completely from clinical care to their offices for two to 3 day at the end of the month to write the reports.

To a large extent the health workers described the documentation of care as something imposed on them by the local health district management, and they often expressed frustration about the time spent on paperwork. The antenatal card which follows every pregnant woman through antenatal care, delivery and the child's first five years of life, was always actively used to obtain information about the mother and child's medical history, growth and past immunizations. With the exception of this card, health workers did not view the written materials as useful to their everyday practice. Rather, they saw documentation as something that took time away from actual care provision. Many health workers perceived that members of the local health authorities were more focused on their reports than securing the best possible patient care. After a field supervisory visit from the local health administration, a rural health worker expressed her frustration about being given another form to fill out during the antenatal consultation:

> We already have four forms to fill out during the antenatal consultation. Every time they [the supervisory team from the health district] come, they give us new forms … They [health district supervisors] do not care about the sick; all they want to do is to be able to write their reports. (Auxiliary midwife)

Health workers stated that in many cases they were unable to carry out the tasks the health district expected of them due to lack of time, resources and training. As one midwife noted, in a health centre with only one device to measure blood pressure it was simply impossible to take the blood pressure of the women in antenatal care, the women in labour and the women in family planning clinic at the same time. In rural health centres which typically have one or two births per night, several midwives argued was that it was impossible to ensure timely surveillance of women in labour during the night *and* get enough sleep to be able to staff the outpatient clinic the following morning. One midwife explicitly stated that pressure from the local health administration's to increase antenatal care attendance compromised the quality of the care she could provide:

> If a health worker says that his capacity is 20 antenatal consultations per day, you should ensure that it is 20 antenatal consultations of good quality. But you don't come yelling at him so that he should do 40 per day. If he achieves 40 antenatal consultations per day that means that the quality is ruined.

3.2. Reporting the 'right' results

Registries and reports, and more specifically the number and coverage of different services provided at the health centres, was an important part of the health district's evaluation of the health centres. Some services, such as the number of women receiving more than two antenatal care consultations and the number of deliveries at the local health centre, were particularly important indicators that were used to evaluate a facility's performance. Local health workers often referred to these numbers when talking about their place of work. One nurse said: 'The antenatal care visit rate is very good here. Last month, we had 245 antenatal care visits. We [the health centre personnel] are very pleased with this number'. Biannual supervision was also an important element of the evaluation of the health centre. In the days preceding the supervision visit at one of the health centres in the study, all the health workers participated in careful preparations: the buildings and courtyard were cleaned, registries were revised and expired medications and HIV tests were hidden. On the day of the supervision, all the health workers were present (which was rarely the case). Prior to the arrival of the district team, the head nurse instructed the health workers to tell the supervisors that antenatal care and family planning were provided every day, not two days a week as was the case. The supervisory team consisted of four district level officials, and the 5-h supervision visit consisted of going through and checking different registries, discussing the trends in the past month's attendance rates and brief direct observations during antenatal care provision.

Information in the reports constituted a way to assess and compare the performance of different health centres and health workers. At the health district, whiteboards were used to display the different health centres' performance rates on specific indicators, such as the completion of the monthly reports and the antenatal care and facility delivery coverage rates. The frontline health workers stated how they felt responsible to report 'good' results to the health district managers, and they were eager to explain and justify 'bad' results during informal conversations. In one health centre for example the health workers were convinced that the population covered by the health centre was overestimated. This led to a lower coverage of institutional births and other services, and to the wrong impression that the health workers at this health centre did not do a good enough job motivating women to use institutional pregnancy and birth care. Health workers hesitated to

report more negative results as exemplified by the reporting of out-of-stock medications at the health centre's pharmacy. As one nurse noted:

> There is a form in our reports where we write out of stock. We cannot write out of stock more than one week …. We cannot [do so] in order to not have any problem with the pharmacist (at the health district).

The health workers paid less attention to the services and outcomes that were less closely monitored by the health district. One example was the registrations of deaths that occurred at the health centre. While a maternal death was to be reported within 24 h, stillborn babies were simply registered in the birth registry and included in the monthly report. Abortions and neonatal deaths were not systematically registered. Responding to a question about the registration of the recent death at a health centre of a 6-h-old new-born, the auxiliary midwife on duty answered that the death should not be registered because 'he is not a stillborn'. Services were also prioritised differently. Supervisors paid less attention to postnatal care, and this was reflected in the practices of health workers. With the exception of one health centre, women were not given an appointment for the postnatal consultation seven days postpartum due to work overload. As one nurse explained:

> Honestly we don't do that [postnatal consultation seven days after birth] here. We should do it, but we don't. We give her an appointment directly on the 45th day. If she has a problem before the 45th day we tell her to come back.

3.3. Documenting preferred accounts

Throughout the observations, a wide discrepancy appeared between the care that was *reported* and the care that was actually *provided* in the health centres. For example, during antenatal care, laboratory tests that were never performed, such as urine and HIV tests were accounted for in writing. Another example pertains to the registration of births that occurred before a woman arrived at the health facility. In three out of four facilities, these births were registered as facility births. When a woman arrived during the night with her recently delivered baby, the midwife on call documented it as if she had observed the baby's vital signs the ten first minutes following the delivery. She noted: 'I have to put something, so I put an Apgar score of 8 (out of 10)'.

Likewise, the partograph which is a central tool in labour surveillance in low resource settings, was never used to monitor labour during data collection. Instead health workers routinely filled the partographs out after delivery including measures that they never actually performed, such as cervical dilatation, maternal blood pressure and foetal heart rate from hour to hour. In recognition of this distortion of the partograph's intended use, the health workers sometimes referred to the tool as the 'postograph'. They saw such after-the-fact data fabrication as being necessary because the detection of a missing partograph during supervisions would lead to being reprimanded by the supervisors. One auxiliary midwife said:

> 'They [district supervisors] ask us to show up the partograph, and we give it to them'.

Health centre workers repeatedly acknowledged that the monthly reports did not reflect the actual care provided on the ground. Indeed, a nurse described the making of the monthly report as 'going to the laboratory to make up numbers'. Although the health workers participated in data fabrication, some of the study informants were uncomfortable with sending inaccurate data in the monthly reports to the health districts. As an outreach health worker put it:

> 'You have to lie and it is not good. You only put some lines, you lie on the partograph, and then you send it in. It is not good.'

Some of the health workers even claimed that health district managers actively encouraged the practice of manufacturing 'postographs'. An auxiliary midwife stated that during the biannual supervision, partographs that were clearly falsified were identified due to inconsistencies, and that the health district team members told the health workers to 'cheat well if they had to cheat'.

The health workers also saw patient files as a way to demonstrate their professional competence. In one health centre, women who only came to antenatal consultation once and did not plan to come back for subsequent consultations were simply not registered, and women who had received previous consultations elsewhere were registered as if the consultations had taken place at the health centre in question. When asked to explain this practice, an auxiliary midwife stated that having a woman with only one antenatal consultation in the registry during supervisions would indicate that the health worker in question had not advised her properly:

> If they [health district managers] see that the woman has only had one antenatal consultation here before delivery, they will mark us poorly. That's why we have to rewrite everything in the registry. Or if the woman has only one antenatal consultation here and then she is lost to follow-up, they [health district managers] will say that we have done a bad job. (Auxiliary midwife)

Patient files were also at the centre of audits conducted by the health district after maternal deaths. These audits were described as a way for district managers to blame the local health workers for the deaths, and as one outreach health worker stated:

> 'They [team from the local health authorities] come, they rummage through everything to know if it's you or if it's God that killed her'.

During informal conversations some of the study's informants argued that the fear of blame lead to underreporting of maternal deaths, especially deaths that occur while transporting the woman to a higher-level care facility. When asked about the consequences of maternal deaths for local health workers, they referred several times to a maternal death that occurred in a primary health centre in the city of Bobo-Dioulasso at the beginning of the fieldwork. In this highly publicised case, a 26-year-old woman died alone in the health centre delivery room while giving birth to her seventh child. She allegedly died after falling from the birthing table in the delivery room in which she had been locked alone while the health workers on call was sleeping in a nearby building. The tragedy led to public protest and to members of the community setting fire to the health centre buildings (Barry, 2011). In all four study sites the case was discussed extensively, from the initial reports of the community setting fire to the health centre, to the criminal conviction and imprisonment of one auxiliary midwife and one outreach health worker for involuntary homicide. As a protection against any accusation of substandard care in the case of a maternal death, clinicians and health district managers perceived a correctly completed partograph as a proof of 'good care' at the health centre. After a complicated delivery that ended with the woman being sent in an ambulance to the regional hospital with a post-partum bleeding, a midwife filled out a partograph retrospectively and entered many details about measures that had not been taken during delivery. When asked about this in an interview some days later, she explained:

> 'It is to protect ourselves. Because even what they say, when it heats up, you manage to show up your partograph. That can prove that you have followed the woman a bit. Even if it's a postograph'.

4. Discussion

The study findings illustrate how the completion of registries and reports consume valuable clinician time, how the focus on health centre numerical performance introduces inaccuracies (and sometimes deceptions) into the evidence base from which policymakers ostensibly make decisions. Written records serve as sites for silent negotiation over how policies are translated into practice. While reporting practices

serve the production of a success story about the institutionalisation of birth care, they also serve to protect the health workers against accusations from district-level supervisors of poor working morale or clinical malpractice.

The findings can be situated within the broader move towards accountability and measurement in global health in general and more specifically in the field of maternal health (Storeng and Béhague, 2017). While global policy indicators are presented as objective, comparable facts, they are neither neutral nor apolitical (Adams, 2016; Erikson, 2015). The inclusion of maternal health among the Millennium Development Goals mobilised attention and funding to the field of maternal health (Shiffman and Smith, 2007). At the same time, it has narrowed conceptualisations of maternal health, often equating it with the number of women giving birth in health facilities and separating it from the broader reproductive health and rights agenda and the actual care provided in facilities (Austveg, 2011; Melberg et al., 2016a; Storeng and Béhague, 2017; Chattopadhyay et al., 2017). Documentation of care plays a decisive role because it acts as a mediator between normative policies and clinical practice (Hull, 2012; Jaffré and Suh, 2016). While documentation is often seen as a way to formalise and standardise care, it also creates possibilities for manipulation from health workers (Hull, 2012).

4.1. The translation of care

Documentation of care is necessary to provide quality healthcare, and health information systems need to balance administrative and clinical needs (Karsh et al., 2010). Clinicians often spend a large part of their working time on documentation in both high- and low-income settings (Hadley and Roques, 2007; Woolhandler and Himmelstein, 2014), but we argue that this is more critical in a setting where resources are scarce. As George (2009, p.221) reported from India, health worker demoralisation arises when the realities at local health centre are 'superseded by mathematical coherence and internal validity of the reporting forms'. Reports are passed from one level to another, and supervision becomes an empty ritual of number checking. In the process the health system goals that the reports are designed to accelerate, are lost. In a multi-country study of HIV clinics, Heimer and Gazley (2012) illustrated how material scarcity makes it difficult for clinicians and monitoring staff to focus on deep compliance rather than bureaucratic or superficial compliance. Hence, it is challenging to transcend the regulatory ritualism of supervisions.

Policy adherence and achievement of targets are dependent on how health workers translate clinical practice into registries and reports. In Burkina Faso, as in many Sub-Saharan settings, there are great discrepancies between programme ideals, established clinical norms and standards of care and the experiences of health workers and patients (Jaffré and Suh, 2016; Olivier de Sardan et al., 2017). In line with other findings from West Africa, we suggest that the production of 'post-ographs' was not only due to lack of knowledge or time. It was also linked to the fact that the partographs were required by the health district and when used during birth, they had the potential to reveal mistakes for which the health workers could be held responsible (Jaffré, 2012; Olivier de Sardan et al., 2017).

We argue that the routine documentation practices of birth care providers are not arbitrary. Rather, they are part of what Olivier de Sardan (2015) refers to as practical norms, 'the latent regulations of the practices of civil servants when these do not follow official regulations' (p. 3). These norms regulate the health workers' responses to policies or travelling models in the field of maternal health care. Even though the widespread discrepancies between the provided and reported care are well known to frontline health workers, officials and experts, the discrepancies are seldom reflected in official reports, policies and guidelines or in the public health literature (Olivier de Sardan et al., 2017). As observed in clinical studies in Sub-Saharan Africa and in the context of performance-based financing in Burkina Faso, data fabrication acts as a tool to manage everyday challenges, and it is a response to high demands, difficult working conditions and unsupportive supervision (Kingori and Gerrets, 2016; Turcotte-Tremblay et al., 2017). This fabrication creates parallel realities, as 'the maternities spoken of in the world of public health are largely fictitious, paper maternities, far removed from the realities experienced by the parturients. Travelling models address these paper maternities, and are built on their image' (Olivier de Sardan et al., 2017, p. 80). The implications are profound. The pressure to implement policies to improve maternal health care reinforces inaccurate reporting practices in health centres, which in turn can result in policies that are incapable of addressing the realities of the practices that occur at these same health centres.

4.2. Powerful policy indicators

In most resource-deprived areas, maternal mortality rates are estimates that reflect a wide range of uncertainty, but they are nonetheless used as an objective comparison across different economic and cultural settings (Storeng and Béhague, 2017; Wendland, 2016). The global-level accountability pressures and the accountability pressures operating on health workers are not necessarily the same. As the goal of skilled attendance filters down from the global and national policy level to local health centres, it influences everyday practices because health workers at all levels are evaluated based on the numbers they report (Danielsen, 2017; Kvernflaten, 2013; Mishra, 2014; Roalkvam and McNeill, 2016). The reporting of successful policy implementation serves as proof of return on donor investments (Storeng and Béhague, 2014), and it facilitates different actors' access to political and economic power (Oni-Orisan, 2016). For example, in rural Malawi, village leaders and the community as a whole worked to increase institutional deliveries and to position themselves for future development investments by producing the right results in line with MDG 5 (Danielsen, 2017).

Policy achievements can be seen as being embodied in health workers' actions through documents and guidelines regarding institutional birth care (Flynn, 2002). Targets are pivotal in self-regulatory practice. By counting the number of consultations and births, health workers adhere to the expected policy aims and they find (sometimes creative) ways of going from 'where they are' to 'where they should be' (Rose and Miller, 1992, p. 187). As reported from in India, registries are simultaneously technologies of self-discipline and enablers of the surveillance, control and discipline of health workers from above (Ferguson and Gupta, 2002). Although primary health workers are situated at the bottom of hierarchical healthcare systems, they have the power to allocate benefits and sanctions to patients that do and do not comply with the goals of institutional birth care (Lipsky, 1980; Melberg et al., 2016b; Chattopadhyay et al., 2017; Wendland, 2018).

4.3. Reversed accountability

Targets might also influence accountability relationships between health systems and communities. Primary health workers in Burkina Faso strive to provide quality pregnancy and birth care, despite health worker shortages, lack of infrastructure, training and the ability to refer patients, when needed (Duysburgh et al., 2013; Melberg et al., 2016a). Documentation and reporting are seen as diverting the health workers' time and focus from the provision of care. This resonates with Hull's (2012) description of accountability contradictions in South Africa, where the documentation of clinical care was prioritised over, and became a substitute for care itself. Medical records lost their clinical usefulness and were transformed into sole 'physical marker [s] of professional capability and institutional accountability' (Hull, 2012, p. 621). As Roalkvam and McNeill (2016) argued regarding policies to increase skilled attendance in India, the encompassing focus on performance accountability and measures of achievements in health centre reports expressed in terms of the numbers of women giving birth at

facilities, moves upwards from health facilities and creates a reversed accountability. Health system actors at all levels, from frontline health workers to Ministry of Health officials, become accountable to global agencies and development assistance partners rather than to women in need of pregnancy and birth care. Or, as an auxiliary midwife in our study put it: 'They do not care about the sick; all they want to do is to be able to write their reports.'

4.4. Study limitations

Some limitations of this study should be noted. The study was not initially designed to explore the topic of documentation practices, and it would have benefitted from an increased focus on the consumption of data at the district level and on the interactions between the health centres and the health district officials. The study findings represent little divergence in the health workers' perspectives on the burden of reporting demands, although the strategies employed to meet these demands varied from health centre to health centre. Our presentation of how national, regional and district level policies are developed in Burkina Faso is based on official reports and may not capture the often opaque processes of how policies are negotiated and adopted by the actors situated at different levels.

Lastly, although the findings produced in this small qualitative study are not generalizable in a statistical sense, we argue that they are highly relevant also to other similar contexts within Burkina Faso. The health centres in the study are subjected to the same health policy, the same health system culture and resource scarcity as health centres in other parts of the country.

5. Conclusion

By examining frontline birth care providers' documentation practices in a rural area of Burkina Faso, this study has documented how health workers placed great emphasis on their reporting practices and the amount of time used on completing the required reports. Health workers felt pressured to provide the 'right' results, and they resolved to document inaccurate data or 'preferred accounts' of the maternity care they provided. We argue that such practices misinform policymakers at all levels, and they can feed into policies incapable of addressing the realities experienced by frontline health workers and patients in these health centres. The reporting practices portrayed here can be situated within the broader move towards accountability and measurability in global health, where targets and indicators act as powerful tools that govern healthcare systems. Although indicators are necessary for healthcare policy and planning, we need to address the uncritical pressure on health workers to produce the 'right' numbers, as this could direct health workers' accountability upwards to district health managers and ultimately to global agencies and donors rather than to the women they are tasked with providing care for.

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Appendix A. Supplementary data

Supplementary data related to this article can be found at https://doi.org/10.1016/j.socscimed.2018.09.001

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