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Aditi Iyer^a, Gita Sen^a & Anuradha Sreevathsa^a

^a Centre for Public Policy, Indian Institute of Management Bangalore, Bangalore, India

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Deciphering *Rashomon*: An approach to verbal autopsies of maternal deaths

Aditi Iyer*, Gita Sen and Anuradha Sreevathsa

Centre for Public Policy, Indian Institute of Management Bangalore, Bangalore, India

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The paper discusses an approach to verbal autopsies that engages with the *Rashomon* phenomenon affecting *ex post facto* constructions of death and responds to the call for maternal safety. This method differs from other verbal autopsies in its approach to data collection and its framework of analysis. In our approach, data collection entails working with and triangulating multiple narratives, and minimising power inequalities in the investigation process. The framework of analysis focuses on the missed opportunities for death prevention as an alternative to (or deepening of) the Three Delays Model. This framework assesses the behavioural responses of health providers, as well as community and family members at each opportunity for death prevention and categorises them into four groups: non-actions, inadequate actions, inappropriate actions and unavoidably delayed actions. We demonstrate the application of this approach to show how verbal autopsies can delve beneath multiple narratives and rigorously identify health system, behavioural and cultural factors that contribute to avoidable maternal mortality.

Keywords: verbal autopsy; maternal death; multiple narratives; health system failures; behavioural and cultural factors

Rashomon, the iconic film by the great Japanese director Akira Kurosawa, is the tale of a death seen through the eyes of different travellers on a forest path. But what did each one actually see? A murder? A suicide? An accident? The film exposes how what each one sees depends on who he or she is; what is in one's head and heart colours what is seen through the eyes! The objective becomes subjective.

Introduction

Unpacking the reasons why women die during pregnancy and childbirth is an act that is both political and methodological. The rules, procedures and processes by which such knowledge is produced are shaped as much by power relations as by technical wisdom and concerns about time efficiency. When biomedical control over health systems is strong, as it is in India, official verbal autopsies often submerge the voices and grievances of poor families in favour of health provider narratives that deny that service provision may have been inappropriate or inadequate.

Such power plays began to concern us during our earliest explorations into the causes of maternal deaths in 2004 as part of an action research project focused on maternal safety and rights in the most deprived district of Karnataka, India. These

*Corresponding author. Email: aditiyer@yahoo.com

explorations produced what seemed to be surprising results. Contrary to our own expectations and the received wisdom from the district health administration, women were not dying due to familial poverty and ignorance. Instead, we discovered high levels of care-seeking during obstetric emergencies, but many instances of poor acknowledgement of and responsiveness to the needs of pregnant women by health providers (George *et al.* 2005). These early insights motivated us to continue investigating every pregnancy-related death over 7 years in 67 villages, using an approach to verbal autopsies that valorises the social context and experiences of poor rural families, and thereby challenges the narratives provided by medical professionals through official verbal autopsies.

Can the subjective be deciphered?

The earliest and traditional use of the verbal autopsy was to ascertain proximal biomedical causes for deaths occurring outside health institutions and in contexts where the quality of medical records is poor (Garenne and Fauveau 2006). By the mid-1990s, it was recognised that verbal autopsies can also be used to identify the personal, familial or community factors that contribute to avoidable maternal deaths (Campbell and Ronsmans 1994). This recognition is now well established (WHO 2004). However, their potential to identify health system factors along with personal, familial and community-linked contributors to maternal deaths has only recently been acknowledged (Kalter *et al.* 2011).

The growing interest in health system factors is a welcome development, especially for countries like India where health providers are loosely regulated and legal or other mechanisms to control medical malpractice are weak. Health system failures in such a context can amount to the provision of inadequate or inappropriate care during obstetric emergencies with fatal consequences for the woman, but scant repercussion for the provider. Well-planned verbal autopsies can uncover such failures in addition to the personal, familial or community factors that underpin the biomedical causes of death.

However, such explorations have to contend with a major challenge: the presence of multiple, and often conflicting, narratives about the same death due to differing interests, uneven knowledge, and power asymmetries among stakeholders. We term this the *Rashomon* effect. For instance, the views of health workers lower down in the hierarchy (e.g. staff nurses, auxiliary workers) may conflict with those of the doctor; or the perceptions of families can be different from those of the health providers. To properly interpret the evidence, therefore, the researcher needs a strategy to sift through these different accounts in order to reach a robust explanation.

In this paper, we propose a strategy to analyse such conflicting accounts in a rigorous way. The approach evolved from the Gender and Health Equity (GHE) Project in Koppal, the agrarian district with the worst health and human development indicators in the state of Karnataka (Sen and Gurumurthy 2008). Ethical approval for this work was obtained from the Institutional Ethics Committee at the Centre for Public Policy, Indian Institute of Management Bangalore, where the project is based.

Review of verbal autopsy methodologies

In this section, we review existing methodologies for verbal and social autopsies of maternal deaths, focusing on the methods of data collection and the framework for analysing social causes. The methodologies used to generate primary data on maternal deaths were identified from manual searches and electronic searches of databases (PubMed, EBSCOHost, JStor and ISI Web of Science) using the terms *verbal autopsy* and *maternal death(s)/mortality/mortalities*. Around 75 publications were reviewed.

Approaches to and issues affecting data collection

Verbal autopsies aim to identify the medical and social causes of death by interviewing knowledgeable persons about the events leading up to it (WHO 2004). Our review of the methods used to collect information highlights a number of limitations.

First, verbal autopsies have typically been used to investigate deaths occurring outside health institutions but not within them. Such an approach is overly restrictive and does not effectively tap the full potential of these autopsies. Some social autopsies do consider deaths both within and outside institutions and draw attention to health system failures by probing the perceptions of family members (Fawcus *et al.* 1996, Langer *et al.* 2000, Supratikto *et al.* 2002, Cham *et al.* 2005, 2007, D'Ambruso *et al.* 2010, UNICEF 2008). This approach suggests that verbal autopsies are needed for institutional deaths not only because 'the quality of medical records is poor' (WHO 2004, p. 44), but also because explorations with family and community members can uncover health system failures that may otherwise remain hidden. However, this literature is as yet relatively thin.

Second, the literature suggests that neither verbal nor social autopsies have recognised or engaged with the *Rashomon* effect. Most autopsies relied on interviews with just one 'knowledgeable' family member. Even when more than one member was interviewed, only one version of the events leading to death was recorded (Barnes-Josiah *et al.* 1998, Bartlett *et al.* 2002, UNICEF 2008, Jafarey *et al.* 2009, Ziraba *et al.* 2009). A few autopsies relied on interviews with health providers (in addition to families) and examined medical records (Fawcus *et al.* 1996, Wessel *et al.* 1999, Walraven *et al.* 2000, Supratikto *et al.* 2002, Cham *et al.* 2005, 2007), but did not have explicit strategies to manage these multiple (and potentially disparate) sources of information. A few of the more recent autopsies that did work with multiple narratives did not engage with the *Rashomon* effect, as their interviews were limited to the family (Prata *et al.* 2012, Visaria 2012).

From our fieldwork in Koppal, we have found strong evidence for the *Rashomon* effect. Each death generates multiple narratives, which are often contradictory in their statements regarding time and cause of death, and in their recall of events and justifications for actions taken. Sometimes this can be due to differential accuracy of recall, or because not everyone is positioned to know everything or comprehend in the same way. But cultural dissonance or knowledge differentials between health providers and communities, as well as recall variability are often not the only reasons. Differences between narratives can also reveal gender- or other biases in norms and beliefs, or efforts to cover up mistakes or deflect blame.

There is also the important issue of power relations. The ‘Beyond Numbers’ report (WHO 2004) states that lay investigators or village health workers are preferable to doctors who may be ‘too directive’ when interviewing family members. While this recommendation suggests an implicit recognition of the power relations between doctors and respondents, there has been little explicit follow-up in terms of specifying how verbal autopsies are done. There is also very little discussion of the possibility that doctors (and other health workers) may have an incentive to colour their narratives of how a patient in their care may have died. A clearly specified investigation strategy to deal with conflicting accounts from multiple narratives is, therefore, essential.

Third, as the length of the recall period is determined more by convention and convenience than by evidence (Fottrell and Byass 2010), it can vary widely (in theory and practice) from under a month (Khatun *et al.* 2012, Prata *et al.* 2012) to under 12 months (Soleman *et al.* 2006) to as much as 5 years (WHO 2004). We have found that shorter recall periods are more appropriate in contexts like Koppal where discriminatory gender relations assign lower value to the lives of women (George *et al.* 2005) and curtail memories of their death. When the recall period exceeded 2 months, the quality of four out of five of our autopsies was compromised by vague responses from marital families and health workers due to impaired memories, their obvious indifference, and due to husbands remarrying. However, other verbal autopsies tend to have much longer recall periods than would probably work in gender-biased contexts.

Limitations in data collection, which undermine the quality of information that the autopsies are able to gather, are compounded by restrictions in the Three Delays Model (Thaddeus and Maine 1994) that further weaken their identification of health system and social contributors to death.

Framework for analysis – beyond the Three Delays Model

The Three Delays Model (Thaddeus and Maine 1994), a powerful framework, is most widely used to identify the social causes of maternal death, unlike frameworks that focus more directly on health system challenges (Núñez Urquiza *et al.* 2005). As is well known, the three delays refer to the delays in the decision to seek care (Delay 1), in reaching an adequate health facility (Delay 2) and in receiving adequate and appropriate care at the health facility (Delay 3). Contained within these are constraints, gaps and limitations at the level of families, the social infrastructure and health facilities, respectively. The most attractive features of the model are its simplicity, comprehensiveness, and ease of application. However, these very features may be a source of critical shortcomings when the model is used to analyse why and how a maternal death actually occurs.

Two aspects are challenging. First, some researchers applying the framework argue that the ‘sequential nature’ of the model belies the ground reality in which referrals take women from one hospital to another, or back and forth between different providers (D’Ambruoso *et al.* 2010, p. 1736). This poses a problem during data analysis because the delays get intertwined in time and it can become impossible to link particular actions to specific delays.

Second, and more central to our argument, is the fact that the model’s conversion of health system, infrastructural and social factors into a uniform and easily

understood metric – time – is problematic. Time or a ‘delay’ is used as the surrogate for these underlying factors. However, this attractive simplicity conflates two very distinct sets of factors affecting one’s chances of survival during an obstetric emergency – the actual timeliness of an action versus its appropriateness. *Both* matter but cannot be collapsed together. A timely action (in the sense of a problem being addressed on time) may be completely inappropriate such as, for example, applying excessive fundal pressure before a woman is ready to deliver. Alternatively, a correct action may be taken, but when it is too late. The latter is a genuine delay while the former may be called a delay only in a tautological sense. The real problem in the former is not time per se, but wrongful action. By labelling all inappropriate actions as delayed actions, the model can divert attention away from the many circumstances in which the underlying cause is not time per se, but the correctness or validity of the action itself. For example, the demand for informal fees for service, or the timely provision of faulty, even insensitive care are not linked to Delay 3, except tautologically. Similarly, poor acknowledgement of and responsiveness to obstetric complications that stem from power relationships between (and among) women, their families, and health providers can be masked by the model’s focus on time. We believe that time is not a very good surrogate for the appropriateness of the actions that women, their families or health providers may take.

We have argued previously that the analytical framework most widely used – the Three Delays Model – can mask or inadequately explore health system (and other) issues that contribute to maternal deaths, especially when they occur within institutions. Furthermore, the reliance on a single narrative, which captures only one version of the events on the road to death, and the lack of clear strategies to handle power relations among different stakeholders, can make the autopsies vulnerable to inaccuracies and bias.

Our approach: identifying missed opportunities for death prevention

Our approach to verbal autopsies seeks to identify and assess the failures to protect women from avoidable mortality by health providers, families and communities, and to identify the corrective measures indicated by these failures for more effective death prevention. It differs from other verbal autopsies in both its approach to data collection and its framework of analysis.

Recognising the presence of incentives to disguise the actual causes of death, our approach to data collection entails working with and triangulating multiple narratives, and minimising power inequalities in the research process.

Our analytical framework that focuses on the missed opportunities for death prevention is also distinctive. It assesses the behavioural responses of health providers, family members, and the community at each opportunity for death prevention and categorises them into four groups: non-actions, inadequate actions, inappropriate actions or unavoidably delayed actions. By ‘non-action’ we mean complete lack of action to tackle a health problem. By ‘inadequate action’ we refer to an action that was basically in the right direction but insufficient to tackle the health problem. By ‘inappropriate action’ we refer to an action that was entirely wrong for the health problem. By ‘unavoidably delayed action’ we mean an appropriate action that was delayed due to actors and processes that were beyond one’s control. We then

compare our diagnoses of underlying social and biomedical causes with those entered in the official verbal autopsy form.

The autopsy entails five steps that follow the notification of a death during pregnancy, childbirth or the postpartum period.

Step 1: data gathering

The process starts from the presumption, based on field experience, that each avoidable maternal death is an event imbued with many emotions – not only regret and loss, but also, especially in the presence of missed opportunities, guilt, shame and anger. The relative magnitude of each emotion varies across different stakeholders. Cutting through these to determine what actually happened is not easy. The approach, therefore, emphasises separate interviews with key eyewitnesses, including caregivers in the family (natal and marital) who spent the most time with the deceased woman (e.g. parents, siblings, husband, in-laws), and the health providers who treated her. Interviews are conducted after the culturally defined mourning period of 2 weeks is over and within 2 months of her death. Wherever available, and with the explicit permission of the family, medical records are also examined.

Power imbalances in the research process are addressed in order to not only ensure that respondents are comfortable, but also to promote veracity in their responses. Respondents are carefully matched with interviewers who have similar claims to knowledge or cultural affinity. For example, qualified health providers are interviewed by an obstetrician–gynaecologist or an urban social scientist who can establish an equal relationship with them. On the other hand, the deceased woman's relatives, friends, as well as the paramedical and informal health providers who treated her are interviewed by a locally recruited and trained field researcher who speaks the same dialect, relates to local customs, and is able to decode idioms and cultural symbols.

An effort is also made to give voice to all key eyewitnesses by emphasising individual interviews over group interviews, where dominant voices tend to prevail. The interviews are conducted in an unthreatening manner after securing privacy, building adequate rapport and obtaining consent. Each interview is treated as a discrete source of evidence and drawn into a timeline with no particular regard for the status of the respondent.

An interview guide is used that builds on – but goes beyond – the standard verbal autopsy questionnaire (Campbell and Ronsmans 1994, WHO 2007). It contains questions on *gender relations* (i.e. work burdens, rest and food intake, mobility, violence and pressure to bear sons), *socio-economic status* of the family (i.e. quality of housing, productive assets, social networks and sources of income), *caste status*, the woman's *reproductive history*, and *current pregnancy* (including antenatal care and treatment adherence). The guide also includes probes on the symptoms of risks and obstetric complications (their timing, severity and underlying causes), with follow-up questions for each risk/complication on the health providers approached and treatment received.

The choice of questions for each interview is determined by the period of time for which the respondent was an eyewitness. Relevant questions from the interview guide are asked in an order that allows a narrative to emerge.

Step 2: construction of a timeline

The timeline is the backbone of the investigation. By systematising the sequence of events on the road to death, it becomes possible to identify discrepancies in the evidence given by different eyewitnesses, as well as the opportunities for life-saving actions. All milestones on the road to death are listed (e.g. antenatal check-ups, appearance of symptoms signifying risk or complications) together with the responses to each of these (e.g. acknowledging the need for care; seeking, receiving, adhering to treatment, etc.). The information is then triangulated by assessing the reliability of each respondent from the internal consistency of his/her interview, assigning greater value to eyewitness accounts over statements based on hearsay, and through corroboration. The validity of each assertion being made is corroborated by identifying confirming evidence from other interviews and medical records, and by assessing whether it is in sync with other linked milestones or actions. Only supported claims are retained. The time attributed to each milestone as recorded in different interviews is then assessed, based on the number of actions that immediately preceded each milestone and the time reasonably required for each.

Step 3: analysis of the medical causes of death

The principal role of the independent obstetrician–gynaecologist is to identify the most probable medical cause of death through a process of elimination, based on information about the deceased woman’s medical and obstetric history; the timing and sequence of presenting complaints; the clinical findings of health providers; radiological and laboratory test results; and treatment received. Standard guidelines (WHO 2000, Government of India 2005) support this process of ‘differential diagnosis’. The WHO definition (WHO *et al.* 2010, p. 4) is then applied to determine whether it is a maternal death resulting from any cause related to or aggravated by pregnancy or its management. Finally, the International Classification of Diseases-10 is consulted to verify and categorise – as direct or indirect – the cause of death.

Step 4: analysis of the missed opportunities for death prevention

The social analysis of missed opportunities for death prevention uses a framework with four questions. The types of actions that could have prevented a maternal death and their timing are identified, keeping in mind the probable cause(s) of death (Figure 1: Questions 1, 2 and 3). Health providers, in addition to community and family members, are considered to be key actors, and the actions they could have taken are identified from among those listed under Question 2. Standard treatment guidelines (WHO 2000, Government of India 2005) are used to identify appropriate diagnostic, treatment and follow-up actions that health providers should have taken for each case. The actions *actually taken* are then compared with those *that should have been taken* to save the woman and categorised as ‘non-actions’, ‘inadequate actions’, ‘inappropriate actions’ or ‘unavoidably delayed actions’, based on the definitions listed under Question 4. Taken together, the framework allows an analyst to identify the missed opportunities for death prevention.

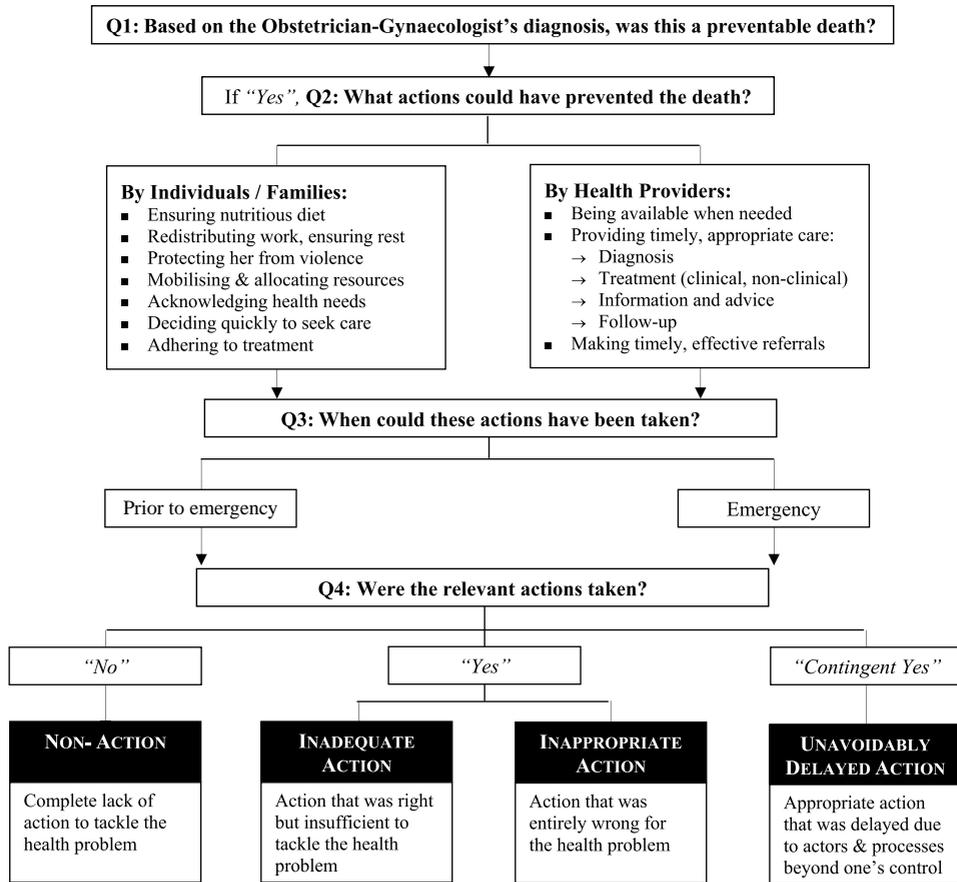


Figure 1. Questions to guide the analysis of missed opportunities.

Step 5: summary of missed opportunities and identification of corrective actions

Based on the results of Step 4, corrective steps are identified to improve the effectiveness of death-prevention measures in health systems, and by families and communities.

Illustration – investigating Durga's death

Step 1: data gathering

News of Durga's death reached the GHE Project through a village functionary who rushed with a colleague to her funeral. Two days later, our field researcher visited Durga's (natal) family to offer condolences and gain provisional consent for the investigation that would start 2 weeks later. The field researcher discovered an aggrieved family that blamed the Medical Officer (Dr X) of the Community Health Centre (CHC) and his staff for their loss.

From the family's accounts, we learned that Durga, aged 24, delivered a stillborn child at the CHC, bled profusely soon after, and was then taken to the District

Hospital where the obstetrician–gynaecologist declared her dead. This same obstetrician–gynaecologist told us that the attending doctor’s claim was different – that Durga delivered a stillborn child but died of an antepartum haemorrhage.

What and who were to be believed? If the diagnosis of antepartum haemorrhage was true, Durga would have exhibited at least some confirming symptoms: a history of trauma or elevated blood pressure; unusual heaviness and abdominal pain; decreased or absent foetal movement before the onset of labour; black or dark-coloured blood; a distended abdomen; premature rupture of membranes; prolonged labour; or painless bleeding before delivery. Was this the case? Or did she die of bleeding postpartum, as her family insisted?

To identify the timing and cause of Durga’s haemorrhage, medical criteria were specified to test the merit of alternative explanations and provide the empirical basis for an accurate differential diagnosis. The symptoms corresponding to these criteria as listed in the interview guide were probed in interviews with eyewitnesses and examined in the parturition register at the CHC and on her antenatal card.

Interviews were conducted with Durga’s family members (sister and aunt separately in her natal home, husband and mother-in-law in her marital home) and with the health providers who interacted with her before and during labour (Drs X and Y, the laboratory technician, staff nurse and midwife).

Informed consent was taken prior to every interview. However, privacy was difficult to secure for the health staff, as Dr X’s trusty subordinate – the laboratory technician – kept an eye on his colleagues in the doctor’s absence. Given this, the short interviews with Dr Y, who examined Durga at the CHC a few hours before she started labour, and the staff nurse had to take place between patient check-ups and whenever the technician had his back turned. The one with the midwife took place in the quiet of her home.

Step 2: construction of a timeline

The narratives pertaining to the period prior to Durga’s labour were not controversial. Her natal family talked candidly about her troubled marriage: her husband’s daily consumption of alcohol and his verbal abuse; her demanding workdays that involved exclusive responsibility for housework, as well as shared responsibility for the care of an infirm father-in-law, and preparation of 100 *rotis* (flat bread) each day for income.

Her natal and marital families reported that she had no obvious symptoms of risk during pregnancy, and that her desire for a living child made her seek antenatal care at least once every month at government health centres. Her antenatal card showed that she received tetanus toxoid injections in her first and last trimesters. Her blood pressure was checked throughout the pregnancy and found normal. Her blood tests in the first trimester ruled out abnormal blood sugar, HIV, hepatitis and syphilis, but revealed mild anaemia (haemoglobin: 9.4 gm./dl). She was routinely given 100 oral iron tablets from the 4th month until delivery, including 40 in the last month. But her haemoglobin level never rose. Abdominal examinations in the last trimester revealed normal foetal heart sounds and presentation. There was no apparent disagreement about any of this.

By contrast, there were contradictory accounts about the actions taken during the emergency, from Durga’s admission into a crowded CHC to her profuse bleeding

immediately after placental delivery and death soon after. Durga's aunt who was present alleged that the health staff attending to her during labour ordered her to push (shouting at or beating her to extract compliance), repeatedly pushed her abdomen, widened her vagina and administered multiple injections. These allegations were denied and downplayed by the staff nurse and laboratory technician, who claimed that the midwife 'applied pressure' only twice, and the midwife who said she 'massaged' the abdomen only once. Yet, their impatience with Durga was likely, given that the CHC was unusually crowded that night with three other women in labour and four in-patients requiring attention. When the health staff got frustrated by their failure to hasten delivery, they woke up the attending doctor (Dr X), who affirmed their actions and then grumbled to Durga's uncle about her 'noncooperation'. All accounts point to this sequence of events. Insensitive treatment by an impatient group of birth attendants, therefore, appears plausible.

The time of death was equally contentious. The family believed Durga was already dead when Dr X referred her to the District Hospital; Dr X claimed she died only 5 minutes before she reached there. The evidence suggests that neither was accurate. The emergency medical technician in the ambulance, who is not under Dr X's administrative control, recorded Durga's blood pressure as 90/60. This indicates that she was not dead at the start of her journey. But the obstetrician-gynaecologist who examined her in the District Hospital noted that her pupils were dilated. This indicates that Durga died en route to the District headquarters, at least 15 minutes before the ambulance reached the hospital.

Other contradictions that could not be analysed further were set aside. For instance, the colour of her blood was difficult to establish and was, therefore, not used to determine the timing and cause of the haemorrhage.

Step 3: analysis of the medical causes of death

On the official verbal autopsy form, Durga's death was attributed to 'ante-partum haemorrhage followed by hypovolemic shock'. However, our investigating obstetrician-gynaecologist averred that antepartum haemorrhage was unlikely, as she found no confirming evidence for any of its underlying causes from available eyewitness accounts and medical records.

Placenta previa was unlikely as none of the eyewitnesses reported bleeding before or after the onset of labour and prior to delivery. Nor did her history reveal multiple pregnancies or prior surgery that could have led to scarring of her uterus. *Placental abruption* was equally unlikely as no signs and symptoms indicative of trauma or hypertension were reported in the interviews and on her antenatal card. Nor did Dr Y, who examined her just hours before the onset of active labour, report her having a tense/tender abdomen, loss of foetal movements, an over-distended uterus, premature labour or ruptured membranes. *Uterine rupture* was also unlikely as the timeline, which mapped her labour, confirmed that it progressed adequately, and eyewitnesses confirmed that the cord did not recede after delivery.

On the other hand, postpartum haemorrhage was highly probable, as the timeline clearly showed that Durga's bleeding after delivery was profuse enough to cause death within 90 minutes. This haemorrhage was not due to *uterine atony* (as labour progressed normally, there were no twins or polyhydramnios or excessive accumulation of fluid in the amniotic sac, and the placenta, as witnessed by Durga's aunt and

the health staff, was complete). Nor was *uterine inversion* likely (as none of the accounts indicated uterine descent postpartum or any delay in placental delivery).

The likely cause of the postpartum haemorrhage was an *extended cervical tear* due to the repeated application of fundal pressure and vaginal/cervical stretching to hasten delivery, although there was no delay in the first stage of labour. The bleeding and its consequences were probably exacerbated by Durga's anaemic status.

Step 4: analysis of the missed opportunities for death prevention

The official verbal autopsy form filed by Dr X identified Durga's family as the cause of her death without assigning any reason. However, based on the timeline, we identified several opportunities for death prevention that were not taken, or were inadequately or inappropriately acted upon by the doctors and health workers who treated her (Table 1). Their failures before the emergency stemmed from a lack of acknowledgement of – and responsiveness to – her need for care. Their failures during the emergency stemmed from poor clinical knowledge/practice and a disregard for Durga's right to humane care. However, these failures did not result in any delays, except at the very end, when the unavailability of specialists at the Sub-District Hospital put lifesaving care beyond reach within the available time.

Step 5: summary of missed opportunities and identification of corrective actions

Durga's death reveals that when facilities are crowded but short-staffed, and supervision inadequate, the use of inappropriate techniques such as the application of fundal pressure to hasten labour can have fatal consequences. This problem is made worse in situations where there is no easy way for patients or their families to hold providers accountable for their actions and when medical malpractice suits are uncommon. Clear rules, case-based training (on risk management and basic obstetric care), and health-facility strengthening would be helpful, but supportive supervision and better mechanisms for accountability are essential.

Conclusion

This paper discusses an approach to verbal autopsies that is distinctive in two ways. First, it actively engages with the *Rashomon* phenomenon and the issue of power in ways that improve the likelihood of correctly diagnosing the causes of death. Durga's death would have been misunderstood or only partially understood if the power claimed by Dr X and his staff over the reconstruction of her tragic story was not challenged by strategies unique to our approach: (1) the independence of the investigation; (2) the emphasis on separate interviews with eyewitnesses; (3) the pairing of interviewers with respondents having equal claims to power; (4) the assignment of a discrete identity to each source of information; and (5) extensive triangulation of all claims ever made regardless of the status of the respondent. It became possible thereby to delve beneath multiple narratives to uncover the causes of her death, which might never otherwise have become clear.

Second, our approach uses an analytical framework that differentiates between the appropriateness of an action and its timeliness. It proves, through Durga's death, that timely care in an appropriate health facility can, in fact, be entirely inappropriate

Table 1. Analysis of the missed opportunities for death prevention

Opportunities for action	Assessment of the actions taken			
	Non-action	Inadequate action	Inappropriate action	Unavoidably delayed action
Prior to emergency				
(1st trimester) Durga obtained a complete antenatal check-up at the General Hospital.	The health staff who examined her did not consider her at risk even though her haemoglobin level (9.4 gm./dl) indicated mild anaemia.			
(2nd trimester) Durga received four check-ups from different providers.	None of the providers were alerted to her non-consumption of oral iron when her haemoglobin level remained unchanged.			
(3rd trimester) Durga received three more check-ups.		The health providers persisted with iron tablets when she needed iron infusions/blood, given her gestation & presentation with 2+ pallor implying <i>moderate</i> , not <i>mild</i> anaemia as her test result of 9.4 gm./dl would suggest.		
Emergency				
(0:00–3:00 hours) Durga's labour progressed normally.				<ul style="list-style-type: none"> ■ Her attendants prematurely tried to hasten delivery by ordering her to push and applying fundal pressure. ■ They shouted at and beat Durga to extract compliance.

Table 1 (Continued)

Opportunities for action	Assessment of the actions taken			
	Non-action	Inadequate action	Inappropriate action	Unavoidably delayed action
(3:00 hours) Frustrated, the health staff fetched Dr X from his home.			Instead of asking his staff to pipe down, Dr X affirmed their actions by instructing them to continue pushing Durga's abdomen and complaining to her uncle about her 'non-cooperation'.	
(4:15–4:30 hours) Durga started bleeding profusely after placental delivery.	Dr X did not attempt to identify the cause of her bleeding by cleaning the vagina, inserting a speculum, and inspecting the cervix.	Her birth attendants tried to manage her bleeding (by changing pads, plugging the vagina) without tackling its root cause.	Although Dr X felt that there was no softening of her uterus, he treated her for uterine atony with oxytocin, methargin, and misoprostol.	The unavailability of specialists at the Sub-District Hospital just 10 km. away forced a transfer (for blood) to the District Hospital 35 km. away.

and, indeed, fatal. In allowing for this analytical possibility, our approach goes beyond the Three Delays Model in its ability to directly identify health system, cultural and behavioural failures that contribute to deaths occurring both within and outside appropriate institutions.

Dr X's record of Durga's death for the health system through the official verbal autopsy was probably distorted by an instinct for self-preservation that led him to actively discredit the grievances of her relatives and to eventually blame them for her death. Yet, Dr X is not alone in his denial of inappropriate care. Our investigations into 30 deaths using this approach have revealed significant health worker failures such as the non-recognition of obstetric risks and complications resulting in inadequate or inappropriate care and delayed referrals, apart from the gross mismanagement of labour that sealed Durga's fate. These failures are almost never acknowledged on the official verbal autopsy forms, which routinely blame families or seek refuge in an unspecific language of delays and, thereby, pre-empt the possibility of learning from every avoidable death.

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