PRIZE WINNING ESSAYS

The Three Delays as a Framework for Examining Safe Motherhood in Kafa Zone, SNNPR[1], Ethiopia[2]

Ruth Jackson
Deakin University

Asnak'ech's baby died on the way from Agaro Bushi to Chiri Health Center. Asnak'ech is around 25 to 27 years old, this was her fifth pregnancy; she has three children, one stillborn. She had walked to Chiri two weeks earlier for antenatal care (ANC) after referral for breech presentation. She planned to give birth at Chiri. But the labour started in the night, nine days early. Her husband started to organise the neighbours to carry her. This took about three hours. Making a *qareza* or stretcher took around 30 minutes. He then had to borrow money from her cousins. This took about 30 minutes. Then the journey from Agaro Bushi to Chiri took about eight hours over mountainous terrain. Around 20 men helped to carry her. Along the way, Asnak'ech was in terrible, agonising pain, tied to the stretcher. She told me she cried the whole way. Half way to Chiri, they knew the baby had died. Later, the health officer told me that she had been in labour at least two days and though the baby's body had been born, the head was stuck.

What Asnak'ech didn't tell me was that only the day before her labour started, her neighbour's child had been washed out of his father's arms trying to cross the river on the way to Chiri for medical care. So she was afraid of crossing the river. This is why they delayed. This happened in the middle of the rainy season.

Introduction

Of all the health statistics monitored by the World Health Organization (WHO), maternal mortality has the highest discrepancy between developing and developed countries.[3] Maternal mortality and disability[4] levels in many

[1] Kafa Zone is one of the 13 zones in Southern Nation, Nationalities and Peoples' Regional State (SNNPR) and covers an area of 11,114 square kilometres. Kafa Zone is divided into 10 *woredas* (administrative district), 277 *kebeles* (smallest administrative and political unit), and 20 Urban Dwellers Associations (UDA) or urban *kebeles*. In comparison, the total area of the state of Victoria is 227 416 square kilometres and has 79 local councils.

[2] This paper is based on a larger report prepared for local NGOs and local government in Kafa Zone following my fieldwork there in 2007. It was presented to the African Studies Association of Australia and the Pacific (AFSAAP) postgraduate workshop and main conference in 29 January to 2 February 2008. I am working towards my Higher Degree by Research through the School of International and Political Studies, Deakin University.

[3] WHO (1998).

[4] 'Maternal morbidity' includes a range of minor conditions of short duration to those which are severe and chronic. The term 'disability' is used to describe long-term, serious morbidity only; specifically chronic, severe, morbidity that results from either pregnancy or childbirth (McCarthy and Maine 1992:24). Most research refers to maternal mortality yet 20 times as many women suffer maternal morbidity or disability (UNICEF 2005).

developing countries are similar to those of the more developed regions of the world at the late nineteenth century.[5] WHO, United Nations International Children's Fund (UNICEF) and United Nations Population Fund (UNFPA) figures show that complications during pregnancy and childbirth are the main cause of death and disability in women of reproductive age in developing countries. An estimated 529,000 women died around the world in 2000 and for each of these women around 20 more suffered injury, infection and disability during pregnancy or childbirth. This means at least 10 million women, or more than a quarter of women in the developing world are affected by maternal death or disability.[6]

In accordance with international policy, Ethiopia's *National Reproductive Health Strategy, 2006-2015*[7] states that a 'key factor contributing to both high maternal and newborn mortality is the low rate of skilled care during pregnancy and delivery'.[8] The percentage of births attended by a skilled professional is estimated at 9.7 percent, with nearly 85 percent attended by an untrained traditional birth attendant (TBA) or relative.[9] However, in Kafa Zone in south-west Ethiopia the results of a community-based baseline study showed that only 3.5 percent of women gave birth in a health institution or with the assistance of a trained health worker or trained TBA.[10] The Maternal Mortality Rate (MMR) was estimated at 738 per 100,000 live births using the sisterhood method.[11] The lifetime risk of a mother dying in pregnancy or from complications related to pregnancy was estimated at 1 in 22.[12] For Kafa Zone, the huge maternal health problems are not reflected in health service delivery data which show extremely low coverage and utilisation rates.[13]

This study employed qualitative techniques to determine how Reproductive Health, in particular the goal of reducing maternal mortality, fits into Ethiopia's development agenda. Semi-structured interviews were conducted

[5] Loudon (1992), De Brouwere et al.(1998).
[6] WHO et al. (2004:1), UNICEF (2005).
[7] Ministry of Health (MOH) (2006a).
[8] MOH (2006a:16).
[9] MOH (2006a:16).
[10] Habtamu Argaw (2002).
[11] The sisterhood method is an indirect method to assess MMR by using information from adults on the survival of their adult sisters.
[12] Habtamu Argaw (2002:14).
[13] More recent figures from the Zonal Health Department (1999 Ethiopian Calendar), show delivery coverage for Kafa Zone as 28 percent. I was told that the timing, completeness and reliability of these statistics, and my observations in the field, were that record keeping could be a hit and miss affair. Given that the majority of births are not attended by trained health professionals, this is a major shortcoming. I tend to agree that reliable and dependable information for decision making in health management is lacking in Kafa Zone (Habtamu Argaw 2002:1-2).

in Kafa Zone with key personnel in government and non-government organisations, in health institutions, and with women in rural and semi-urban areas. I interviewed 23 women in their homes. Of these women, five of them had had one pregnancy and eight of the women had had over seven pregnancies. One woman had been pregnant 14 times. I also interviewed 17 women waiting for ANC. Five of these women were pregnant for the first time and three of these women had been pregnant seven or more times. I spent time visiting Bonga Hospital, four health centres, one clinic and 11 health posts. I accompanied staff from Chiri Health Centre on their monthly outreach vaccination clinics to a number of the health posts. Finally, I interviewed people from the Zonal Health Desk and the Finance and Economic Development office at local government level and staff from five NGOs in Bonga. Most of the time I travelled by foot with some travel by mule or vehicle. Generally, most people in rural areas still travel by foot as there is no alternative particularly in the rainy season. The majority of women interviewed gave birth at home with the assistance of their husband, mother-in-law or neighbour.[14] Only four of the women interviewed had given birth in a health centre or hospital for one of their pregnancies. For three women interviewed, transfer to a health facility during labour meant that they survived but that their baby did not.

I used the conceptual framework—Three Phases of Delay—to examine the obstacles to the provision and utilisation of high quality, timely obstetric care[15] in Kafa Zone, SNNPR. A proliferation of maternal health programs and strategies funded by governments and international agencies have given substantial attention to the historical neglect of women's health and needs and aimed to reduce maternal mortality in developing countries. Consequently, the *National Reproductive Health Strategy*[16] is based on the presumption that western biomedical health interventions will reduce maternal mortality and disability by devoting resources to modern health care and delivery assistance. As around 75 percent of maternal deaths arise from direct obstetric causes such as haemorrhage, obstructed labour, infection, toxaemia and unsafe abortion, it is argued that the majority of these deaths could be prevented with

[14] In *Health status, health services and health related knowledge, attitude & practices (KAP) in Kafa Zone: The results of a community-based baseline study*, mothers were asked about the place of delivery for their last child (Habtamu Argaw 2002):

Health institution	0.9 %
Home (with assistance of trained health workers)	1.3 %
Home (with assistance by trained traditional birth attendant)	2.0 %
Home (with assistance of husband)	47.0 %
Home (with assistance of mother)	31.4 %
Home (with assistance of relatives)	11.0 %

[15] Thaddeus and Maine (1994:1092).

[16] MOH (2006a).

timely medical treatment. But delay is considered a pertinent factor contributing to maternal deaths.[17] The First Delay is the delay in deciding to seek care during an obstetric emergency; this decision is influenced by cultural and socio-economic factors such as who makes decisions at household levels, but also by factors that shape decision making such as cost, distance, and perceived quality of health care at the health facility. The Second Delay is the delay in reaching a medical facility, which is related to accessibility and options for transport including time and cost and adequacy of the referral system. Delay Three delineates delays in receiving appropriate treatment in a health facility. This is mainly related to the quality of care and shortages of trained qualified personnel, supplies and equipment. In the course of this paper I will only examine a few aspects of the Three Delays highlighting some of my research around distance, transportation and the referral system which is described as the flagship of the Ethiopian *National Reproductive Health Strategy*. They are presented in order from when a prospective patient decides to seek care and then tries to reach a health facility.[18]

The 'Three Delays'

There was an elderly mother who had had 11 children, her daughter Almaz who had had 10, and the elderly mother's daughter-in-law with her first baby. We were taken into the new hut that was still in the final stages of completion and the old woman apologised that they had just finished coffee. With chickens running in, squawking and the baby crying I strained to hear as Almaz spoke slowly and made no effort to speak over the noise. She told me how she had been in labour for three or four days in Sherada in a rural part of Kafa Zone. They kept hoping the baby would be born but the labour continued. There was no nurse so they carried her by stretcher for five hours to the road at Gojeb. There she was taken by bus to Bonga. In Bonga Hospital she was in labour for another two days. The baby died but they didn't remove it. Her husband went home, sold the cow and borrowed money for her treatment and the cost of transportation. Finally, Almaz went to Jimma Hospital where the baby was removed by Caesarean. She left her husband because of ongoing ill health and now lives with her elderly mother.

Delay One—delay in deciding to seek care

Thaddeus and Maine[19] discuss health seeking behaviour as being influenced by the 'characteristics of the illness as perceived by individuals': 'pregnancy and childbirth are commonly considered natural, normal work for women…just as pregnancy is considered a normal event, death during labor

[17] Thaddeus and Maine (1994:1092).
[18] (1994:1093).
[19] Thaddeus and Maine (1994).

and delivery may sometimes be considered 'normal' or inevitable'.[20] A decision to seek care, whether self care, traditional, modern or a combination of them, depends on the cause to which an illness, in this case, prolonged labour, is attributed. Traditional remedies may be tried first because that is what is available and accessible.[21] For example, the normalisation of prolonged labour was described by some women who had been or knew women who had been in labour for many days hoping that the baby would come. Techniques to deal with prolonged labour or retained placenta included shaking the woman, shouting, massaging her abdomen with butter or binding it with cloth. A drink made from coffee leaves was given to stop haemorrhage. Prayer as a 'palliative strategy' was mentioned by a number of women and TBAs that 'may contribute to delays' and taking more proactive steps.[22] For some, the decision-making process results in carrying a woman to a health facility.

All the health professionals I interviewed and many of the women and their families talked to me about the problems of distance and inaccessibility to roads and to transportation, in Kafa Zone, as over 90 percent of the population (estimated at one million people) live in rural areas. People live in scattered groups of two or three traditional huts a long way from the health post or health centre, road or town. But during the course of my research I was unable to disentangle the disincentive and the actual obstacle of distance because distance is normalised in everyday life. People walk to visit the neighbours, relatives, to go to the market or to church. They walk to collect water, firewood, to take the cattle to graze. Take the example of walking to the market. Women will walk long distances carrying heavy loads of charcoal, firewood, large bundles of *gomen* (walking stick cabbage) and maize on the head or back 'in order to obtain some cash money, even when the profit in fact is minimal'.[23] But going to the market is not just about obtaining cash money. Women welcome the opportunity to get out of the house and socialise with other women; to talk on the way and at the market. Stopping at a *tej* (wine made from honey and the local *gesho* plant) or *tella* (mild alcoholic drink made from maize or barley) *bet* [24] on the way home is a social occasion as women gather together to gossip and catch up with all the news. Distance also seemed related to time in that people spent a lot of time waiting. They

[20] Thaddeus and Maine (1994:1096, 1097).
[21] Thaddeus and Maine (1994:1098).
[22] MOH (2006b:6).
[23] Abiyu Million et al. (2002:23).
[24] *bet* or house. *Tej* or *tella bets* are generally the front room of the house. A pole with a bunch of a trumpet like flower attached on the top indicates a *tella* bet. A broken piece of an old *metad* (earthenware oven used for cooking *injera* (flat pancake like bread) on the fire) indicates where food is served. *Bet* is also used to indicate *bunna* (coffee) *bet*, *temhert* (school) *bet*, *shint* (toilet) *bet* and so on.

waited for the rain to stop. They waited for crops to grow. If they walked to a road, they waited for a bus or truck to come by as there is no regular transport except between major towns. People waited to be seen at the health facility. They waited for a baby to come. No one seemed to try and hurry things along because waiting seemed part of life.

Delay Two—delay in reaching a health facility

'The accessibility of services plays a dual role in the health-care-seeking process. On the one hand it influences people's decision-making but on the other hand it determines the time spent in reaching a facility after the decision to seek care has been made'.[25] In rural areas delays due to distance and the unavailability of transportation are common. People may have to travel long distances over difficult terrain to reach the few medical facilities that exist. Secondly, the scarcity of transportation means that rural people often have to walk or improvise transportation to reach a medical facility. During this time the patient's condition can deteriorate making the condition more difficult to treat on arrival. In addition, reaching a health facility does not necessarily mean the end of the journey as the nearest facility may not be equipped to treat the condition or even administer essential first aid so patients are referred to another facility that is better equipped.[26]

The *National Reproductive Health Strategy* is based on a system of referrals from the health post providing essential obstetric and newborn care to the rural/district hospital providing comprehensive EmOC including Caesarean section and safe blood transfusions. In Kafa Zone, the aim is to build one health post for each *kebele* staffed with two Health Extension Workers (HEWs). The health post is meant to be only five kilometres from each household. The aim is also for each *woreda* to have a health centre capable of doing Emergency Obstetric Care (EmOC). Health professionals I interviewed foresee there will still be a problem of accessibility for many people in the rural areas in Kafa Zone to reach the health facilities[27] and also with the referral system as the *woreda* health centre and hospital are so far from the *kebeles.*

[25] Thaddeus and Maine (1994:1100).
[26] Thaddeus and Maine (1994:1102).
[27] Currently, health service provision in Kafa Zone consists of 130 health posts; 19 upgrading health centres, eight health centres (including one run by an NGO (Lalmba)—Chiri Health Center), five health centres under construction and one rural hospital. According to the Zonal Health Department there should be 35 health centres. There are three doctors, five health officers, 137 nurses with certificates or diplomas, one laboratory technologist and nine laboratory technicians in the Zone. There are currently 360 Health Extension Workers (HEWs) with another 223 in training.

T: the referring system is, first you know there is a health post, she comes to the health post, and if its difficult to remove the placenta or deliver, they refer to the nearest upgrading health centre, after the health centre there is no health officer, but there is a nurse, the nurse tries to remove the retained placenta or obstructed delivery. When this nurse, it's difficult to take out this retained placenta, or delivery procedure, they refer to the next 100,000 health centre. So this health centre, if there is a health officer, if they can do C.S. or craniotomy, or whatever, they can remove it, unless the health centre refers to Bonga, Bonga refers to Jimma. This is the referring system.[28]
Ruth: And every one is a delay.
T: Especially the delay with problem of retained placenta. With no drug like Pitocin and Ergometrine and other things are materials like a glove for example. There are no gloves in a health post, for the last year. For the time being Netherlands is supplying the gloves.
L: with uterine rupture we refer immediately to Bonga Hospital and with malpresentation like breech or shoulder presentation or if the BP is very high then she will need a C-section. Also, if more vaginal bleeding then she is referred to Bonga Hospital—then if Bonga hasn't got blood she must go immediately to Jimma.
Ruth: what if there is no one here with a vehicle—how can you transfer to Bonga?
L: What we should do is—we go to the *woreda* administration office and we ask them if they can take a vehicle for us—if they do not have—she has to wait by the bus terminal—so she will go by bus [Note: **all** the *woreda* vehicles were out of commission during the time I did research].
Ruth: And in the middle of the night?
L: We cannot take them in the night.

J: We experienced taking a lady with vaginal bleeding to Bonga Hospital…but they are not working, there is no emergency surgeon so again there is a delay. What they did is we refer her to Jimma, and then on the way the car was stuck. And they delayed. She died on the way…this is the problem with maternal mortality.

Rural people normally walk or use animals such as horses or mules. If they have money, and they reach a road, they can flag a passing vehicle to take the patient to the hospital. I experienced the scarcity of transport waiting for buses that don't leave until they are full and also walking on empty country roads. For many remote villages where there is a road of sorts, Isuzu trucks are the only form of infrequent transportation. I witnessed a number of people

[28] All quotations are verbatim.

being carried by *qareza* or stretcher made from bamboo and other natural products. The patient is tied to the stretcher and covered from head to foot in a white cotton shawl. Usually there are around 20 men to take turns to carry the stretcher. Other people from the village will also come for support so there could be 30 or 40 people accompanying the patient.

Scarcity of transport also affects nurses or HEWs working in remote locations or even reasonably close in distance to the *woreda* centre. They must travel once a month to pick up their pay, hand in paper work to the health desk and put in an order for medicine. If they have a refrigerator they must maintain a cold chain for vaccinations and other drugs such as Ergometrine. This means that every month staff can be away from their place of work for a number of days. For example, travel from Deckia to Chiri means travelling for up to eight hours by foot or on mule. In the rainy season parts of this road can be impassable as water comes over bridges.

Delay Three—delay in receiving adequate/appropriate care in a facility

Phase Three Delays are an indication of inadequate care that results from shortages of staff, essential equipment, supplies, drugs and blood as well as inadequate management. Late or wrong diagnosis and incorrect action by the staff are other factors that contribute to delays in the timely provision of needed care.[29] On numbers alone, there is definitely a shortage of staff at all levels in Kafa Zone although some of these shortages should be addressed within the next few years. When I interviewed health practitioners they also expressed concern about training because a lack of emergency skills can mean patients are not referred immediately;

> D: One of the problems, the other thing is still the understanding and knowledge of health professionals about the danger signs, particularly the vital signs, like headache, swelling of the legs, all these danger signs might not be detected….Some of the professionals know some of the danger signs, some may not know. Or, they look at the mother simply without checking the vital signs, without checking the danger signs. For example, if you take one nurse, he can mention to you, but not apply to the patient, that is the problem.

But from the health practitioner's point of view, it can be extremely frustrating to work without enough staff or to be underutilised after you have been trained.

[29] Thaddeus and Maine (1994:1102).

T:…its so difficult to take care, when you are coming to our staff and I am doing assessment and the other thing is an emergency is coming with a human bite, I will leave you to suture, then I am suturing, there is a delivery coming, it is frustrating, so I left this fracture or whatever, I go to this emergency obstetric case, that is the problem.

D: There is no obstetrician here, there is one general practitioner who has been trained in emergency surgery and he can do Caesarean section, he can do laparotomy for some sort of internal obstruction. So they are doing that part, but here, he is the only one.
Ruth: He can't work 24 hours a day…
D: Yes and the other thing is if he is available he is doing that, but he can be on vacation or another reason he may be out of Bonga and the only option is to refer the mother to Jimma.

Despite many new facilities being constructed in Kafa Zone I was told there is currently no funding or budget allocation for equipment, medication or transportation for the health posts or health centres. Not more than 40 or 50 of the existing 130 health posts have any equipment. This is clearly an ongoing issue because the plan was to ask external donors to equip all the facilities.

The Three Delays and International Development

I used the Three Phases of Delay as the theoretical framework at this stage of my research because it seems taken-for-granted that many of the problems of maternal mortality and disability arise out of delays. The reduction of maternal mortality and disability, when analysed in terms of medical causes of death which can be addressed through modern health care provision, looks relatively simple: yet the Three Delays model shows it is not an easy task as there is a need to understand the social context and other factors when complications occur.[30] Furthermore, I have been aware from the start that this is a western model used in a non-western setting and that it was my interest in development with a focus on maternal health that led me to do research in Ethiopia.

The Three Delays implies that the barriers or obstacles to reducing maternal mortality will be removed through development, the development of modern health care services. Most of the strategies put forward put an emphasis on medical solutions by focusing on the direct causes of maternal mortality such as haemhorrhage and obstructed labour as it is argued that the majority of these deaths could be prevented with timely medical treatment. One shortcoming of this strategy is the implicit assumption that an effective

[30] Endale Workalemahu (2003:25).

demand exists and that the problem is primarily from the supply side.[31] Yet in Kafa Zone, the majority of births are not attended by trained health professionals but by the husband, mother-in-law or neighbour of the birthing woman.

Over time the process of defining and measuring development has undergone significant change but the West's idea of progress is based on science, technology and the continuous acquisition of knowledge. In this instance, the Ethiopian *National Reproductive Health Strategy 2006-2015* is in its second year, and it is 11 years since the decentralisation of the health system. The year 2015 will see the culmination of nearly three decades of commitment to the new concept of reproductive health and conclude nearly 20 years of international support for the Health Sector Development Program. It will be 15 years since the Millennium Development Goal Five aimed to reduce maternal mortality by three quarters. It will also be almost 70 years since the formation of the WHO and its commitment to Maternal and Child Health.

I interviewed people from government or NGOs and asked what they thought development meant. Their responses included economic development, the construction of roads and bridges, clean water supplies, electricity and telephones, schools, health centres, hospitals and so on—the more visible signs of change. But for others, development cannot occur if some members of the community such as women or the Manja[32] people are excluded. Some people talked about the problems of change.

> …from our perspective…even if you have all this physical infrastructure, some people, some sections of the society are not allowed to use it equally with others. We don't think that is development (NGO project staff member).
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> …to define development...when you go down to the village, *woreda*, they see construction of buildings, cars, these are all signs of development, computers, but they give less attention to those human mentality, psychological satisfaction, freedom, security, all issues which are important…(NGO project staff member).
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> …what I learn now is that there is development, there is change, but sharp turns are too much…changes have their own positive things and also they affect the central structure, they affect politics, but I see that

[31] Diallo (1991).
[32] The Manja are the largest marginalised group of craftworkers and hunters in south-west Ethiopia who are excluded from mainstream society.

there will be some progress, with too many people falling under poverty (NGO project staff member).

One person commented about building new health posts:

> O: What is a health post?...does it make a difference whether this kind of health post exists or does not exist?...you see, this is the problem, if we build one health post for each *kebele*, for what? If there is nothing there.

The *National Reproductive Health Strategy*[33] aims to reduce maternal mortality based on a referral system: from Health Extension Workers (HEWs) providing essential obstetric care at health posts, to mid-level service providers being able to provide basic EmOC and to refer complications to appropriate facilities that are equipped and staffed to provide comprehensive EmOC services.[34] It is argued that this "flagship" or referral system is the key to reducing the delays that currently contribute to maternal mortality and disability in Ethiopia. None of the women I interviewed used the health post for normal delivery or referral during delivery. Many health practitioners said that staff at some health posts do not refer on time, do not examine patients properly and that their training and experience is inadequate at this stage. But the HEWs I met described their heavy workload and expectations on them. Many of them are doing their best with no supplies, no delivery kits, no gloves or Ergometrine, no functional refrigerator, examination table and so on. These shortages of supplies and equipment must in part be attributable to insufficient budgets and weak management skills at the *woreda* level. If women or their families seek care from the health post, health centre or hospital and these

[33] Targets in the *National Reproductive Health Strategy 2006-2015* (MOH 2006a) are to:

- Increase to 60 percent the proportion of births attended by skilled health personnel either at home or in a facility (representing a six-fold increase from the current 9.7 percent).
- Increase national ANC coverage levels to 70 percent.
- Equip one health post per 5,000 population to provide essential obstetric and newborn care.
- Equip one health centre per 25,000 population to provide basic EmOC and newborn care.
- Equip one rural/district hospital (250,000 population coverage) to provide comprehensive EmOC.
- Reduce maternal mortality to 350 deaths per 100,000 live births by 2015.

[34] Ethiopia's health care delivery system is being reorganised (decentralised) to include: (i) primary health care units (PHCU) comprising health centers and five satellite health posts designed to serve 25,000 people, (ii) district hospitals that give comprehensive care and training to catchments populations of 250,000 people, (iii) zonal hospitals providing services in the four basic specialities to 1,000,000 people and clinical training for nurses, and (iv) specialized hospitals that provide sub-specialist and clinical training (MOH 2006a:5).

facilities are forced to refer women to the next level of facility, this delays access to appropriate treatment.[35] For this reason, I concluded that this strategy has *structured in* delays by default as the most cost effective way to provide health care to the rural population.

Conclusion

Using the Three Delays framework, distance is the first barrier or obstacle that separates potential patients from a health facility. Distance was a significant factor in the two examples I used but I also interviewed women who lived less than one hour's walk from a health post, health centre or hospital who gave birth at home. Asnak'ech and Almaz both described being carried on a stretcher to reach a health facility after being in labour for a period of time. After some delay, Asnak'ech was carried to Chiri Health Center and her dead baby was removed quickly. Almaz endured many more days in pain as she was carried first to the road, then by bus to Bonga where she was in hospital for two more days, and finally back on the same road after contracting a bus to Jimma for a Caesarean section to remove her dead baby. Given Kafa Zone's rural population and mountainous terrain there will be an ongoing need to refer women requiring comprehensive EmOC from remote locations where only essential obstetric care or basic EmOC is available because of inadequate care, staff and equipment shortages; these delays mean referral to the next level of facility.

Much of the existing literature about maternal mortality and disability in developing countries focuses on describing the magnitude and causes of the problem, the difficulties in measuring maternal mortality; the obstacles to Safe Motherhood; and, the interventions needed to strengthen modern health systems. Because maternal health indicators are so closely associated with key service delivery issues such as equity and efficiency, they have been used to assess the functioning of health systems and proposed as a measure of the performance of a country's overall health system.[36] But a growing number of studies document the need to take a more comprehensive perspective to understand the problems of maternal mortality and include 'the macrostructural—i.e. the social, cultural, economic and political—determinants of health'.[37] For example, if maternal death is directly related to the distance between women's homes and health care facilities, other factors such as infrastructure, transport and social services should be examined.[38]

[35] Cham et al. (2005:5).
[36] Gill et al.(2007:1353-4), Gülmezoglu et al. (2004), WHO, UNICEF and UNFPA (2004:14).
[37] Gil-González et al. (2006:904).
[38] Gil-González et al. (2006:907).

By using the Three Delays framework, it is possible to see how complex the issue of reducing maternal mortality and disability is on the ground. In the course of my research it became clear to me that the Three Delays framework is still inadequate because maternal health care is not just about using maternal health care services for specific purposes as 'behaviours related to health and reproduction are everywhere, [and are] associated with symbolic meanings beyond their immediate instrumental effects'.[39] The issue of distance captured the essence of this phenomenon for me. Because walking is the 'normal' way to get around, I wondered if the normalisation of walking is actually viewed as a problem by people as much as westerners think it is. Because of the normalisation of walking to get from place to place I felt unable to disentangle the disincentive from the obstacle of distance. There is still much delay as it takes time to alert the community, make the stretcher, collect money and so forth. And if there is access to a road and people have money, then there is also a delay in flagging down a vehicle as there is a shortage of transportation and poor roads. It may be possible to conclude that the problems of maternal mortality and disability in rural Kafa Zone compare to other solutions or population groups and the sort of solutions that may exist. But many of the key issues relate to how societies manage the phenomenon of reproduction—this can have a serious impact on the determinants of maternal mortality such as distance and inaccessibility. The Three Delays is an effective model to begin examining Safe Motherhood but it is still inadequate given the complexity of people's lives. I would argue there is still a need for using a socio-cultural approach to explore such issues as the normalisation of walking in everyday life.

[39] Obermeyer (2001:2).

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Note: All Ethiopian names are entered as is traditional practice, in alphabetical order of the author's first name followed by the father's name.

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