

# The myopia of governments contributes to maternal mortality: dying from socioeconomic and physical distances

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**Geographical, socioeconomic and cultural factors contribute to high maternal mortality rates in developing countries**

Most of the ministries of health in developing countries have declared that they intend to do everything in their power to reduce the high rates of maternal death. However, the lack of efficient public policies aimed at correcting this problem is undermining their intention. Maternal deaths are a bad visible indicator of a country's development. The Millennium Development Goal number 5 aims to reduce maternal mortality by 75% between 1990 and 2015. To do so, its priority is to improve public hospital healthcare by qualifying the professionals that work there. Although this is undoubtedly a priority, equally important is trying to work out why up to 50% of birth deliveries do not take place in healthcare centres (especially in rural areas).

The physical distance between villages and healthcare centres can be used as a metaphor for other existing distances, such as the economic and cultural ones. Despite the existence of health centres with trained professionals to assist in deliveries, there are many obstacles to their use because of these economic and cultural issues as well as the physical distance. Thus seeing these problems, professionals and politicians who are not capable of other non-healthcare in relation to maternal mortality may hinder developments of healthcare plans. The following case is an example.

A young 23-year-old woman lived in a village 10 km away from Kebemer in the south of Senegal. She was towards the end of her pregnancy and thought everything would be fine because she already had given birth to two children without any problems. In the eighth month of pregnancy, she suddenly began haemorrhaging. Knowing that she was young and healthy, she did not consider it was serious. Her 4-year-old daughter went to a neighbour and they looked for a means of transportation to take her to the hospital. However, although there was a vehicle in the village, petrol is very

expensive but all the village inhabitants made a small contribution and finally they had the necessary amount of money. The woman continued to bleed. At 10.30 am, she began to haemorrhage more severely. The trip to the hospital took 1 h and 15 min because the road was in a very poor condition. By 11.15 am the woman had died from hypovolaemic shock.

In Latin American countries, as well as in African and other developing countries, the decision to go to a maternal healthcare centre to give birth depends on the pregnant woman and also on the person with authority within the family. This person is often the mother-in-law or the partner.<sup>1 2</sup> Once the decision to go to a healthcare centre has been made, women are faced with the obstacle of geographical inaccessibility.<sup>3</sup>

If a woman and her family decide to receive home- or community-based care, the woman is assisted by a traditional birth attendant or by a trained midwife. These women's obstetric knowledge is passed on from one generation to another, although some have been trained by the ministries of health.<sup>4</sup> Women have stated that they trust the care given by these midwives more than that received in healthcare centres.<sup>2 5</sup>

In the case of El Salvador in Central America, 24% of the healthcare centres for assisting deliveries are inaccessible to the women of the communities they serve.<sup>5</sup> For example, it takes 6 h to travel from Panchimalco to the nearest healthcare centre, which is situated 10 km away. Complications were detected in 47% of the deliveries (62.5% maternal) in this community. In all, 48% deliveries were assisted by trained or experienced midwives, 31% by a woman's relative and 13% in a public healthcare centre; 8% were delivered by the woman on her own. The following reasons motivated the method selected: economic reasons (48.3%), customs and traditions (25.8%), distance (19.4%) and trust

(6.5%).<sup>5</sup> So improving public hospital-based healthcare would not have helped to avoid the young woman from Kebemer's death.

Economic reasons for another one of the obstacles that women requiring specialised care during their pregnancies, deliveries or post-puerperal period are faced with. "Not having money to pay for a medical consultation" was stated by 48% of the interviewed people as one of the main causes for not using the public healthcare system in El Salvador, according to the Home Survey on Multiple Purposes of 1999.<sup>6</sup> Although representatives from the Government of El Salvador claim that the Cost Recuperation System—charging for medical care—is not applied, according to those who use the healthcare system in La Libertad, El Salvador, it is. Therefore, being a woman and poor is a combination that implies a high risk of dying from pregnancy, delivery or post-puerperal or miscarriage complications.<sup>7-9</sup>

Unfortunately, in high-risk deliveries, much time is lost trying to collect the necessary money for transportation and for medical care as well. As in this case, the solidarity of the community is a resource that can be counted on. However, this is not always so. Many communities lack the necessary economic resources to be able to give help.

Maternal mortality is one of the main public health problems in developing countries. Its multiple causes include the lack of trained professionals inefficiency of the health services and individual and macro-structural factors.<sup>10</sup> The economic and cultural barriers, the lack of democracy and scarce knowledge are fundamental social causes that contribute to the increase in maternal mortality.<sup>11 12</sup>

Without questioning the authority of the ministries of health in this matter, additional non-health strategies should be considered by professionals and politicians to prevent and control maternal mortality. Furthermore, other governmental agencies such as the Ministry of Education, Labour/Transport and Finance should be involved in achieving this goal. If not, many women will probably continue to die due to the long distances from hospitals and other determinants such as poverty, economic accessibility and the lack of trust in public services.

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## EDITORIAL

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## REFERENCES

- 1 Röst M, Johnsdotter S, Liljestrand J, *et al.* A qualitative study of conceptions and attitudes regarding maternal mortality among traditional birth attendants in rural Guatemala. *Br J Obstet Gynaecol* 2004;**111**:1372–1377.
- 2 Herrera Torres MC, Cruz Burguete JL, Robledo Hernández GP, *et al.* Economía del grupo doméstico y muerte maternal entre mujeres indígenas, México. *Rev Panam Salud Pública* 2006;**19**:69–78.
- 3 Orji EO, Ogunlola IO, Onwudiegwu U. Brought-in maternal deaths in south-west Nigeria. *J Obstet Gynaecol* 2002;**22**:385–8.
- 4 Gerencia de atención integral en salud a la mujer. *Evaluación de disponibilidad y uso de cuidados obstétricos de emergencia en El Salvador*, Ministerio de Salud Pública y Asistencia Social. San Salvador, 2004.
- 5 Durán Sánchez C. Creencias y prácticas de mujeres que verificaron parto intradomiciliar en el municipio de Panchimalco. Junio a Diciembre de 2005. Facultad de Medicina. Universidad de El Salvador, 2006.
- 6 Ministerio de Economía de El Salvador. Encuesta de Hogares de Propósitos Múltiples, 1999. Dirección General de Estadística y Censos, 1999.
- 7 Graham WJ, Fitzmaurice AE, Bell JS, *et al.* The familial technique linking maternal death with poverty. *Lancet* 2004;**363**:23–7.
- 8 Taguchi N, Kawabata M, Maekawa M, *et al.* Influence of socio-economic background and antenatal care programmes on MM in Surabaya, Indonesia. *Trop Med Int Health* 2003;**8**:847–52.
- 9 Okonta PI, Okali UK, Otoide O, *et al.* Exploring the causes of and risk factors for maternal deaths in a rural Nigerian referral hospital. *J Obstetrics Gynaecol* 2002;**22**:626–9.
- 10 Álvarez-Dardet C, Ruiz MT. Thomas McKeown and Archibald Cochrane: a journey through the diffusion of their ideas. *BMJ* 1993;**306**:1252–4.
- 11 Gil-González D, Carrasco-Portiño M, Ruiz MT. Knowledge gaps in scientific literature on maternal mortality: a systematic review. *Bull World Health Organ* 2006;**84**:903–9.
- 12 Franco A, Álvarez-Dardet C, Ruiz MT. Effect of democracy on health: ecological study. *BMJ* 2004;**329**:1421–3.

## THE JECH GALLERY

## Game, set and match

Evidence to support the benefits of physical activity for health is abundant. Yet, physical activity levels are in decline, contributing to an increasing prevalence of chronic disease.<sup>1</sup> Two-thirds of men and three-quarters of women do less than 30 min of moderate-intensity physical activity on >5 days a week.<sup>2</sup> An increase in car travel, particularly for short journeys, is one factor associated with the loss of habitual physical activity.<sup>3</sup>

To encourage uptake of physical activity, supportive environments including recreational facilities have been shown to be valuable in promoting and sustaining an active lifestyle. The presence of recreational facilities nearby has been found to be associated with their use, as well as meeting physical activity guidelines.<sup>4,5</sup>

Within the workplace, taking action to promote physical activity reduces absenteeism, increases productivity and contributes to cutting healthcare costs.<sup>6</sup> On-site workplace sports and activity clubs can provide a forum for promoting good social contact among employees and opportunities for carrying out physical activity during the working day.<sup>7</sup>

Figure 1 shows a new car park developed on a site that was once a tennis court within a worksite environment. Previously, employees benefited from being able to incorporate a game of tennis into their working day or after work. However, with the increased demand for car parking, the tennis court was re-developed and a car park constructed.

The loss of this tennis court demonstrates that the organisations' priorities are focused on supporting car travel and parking rather than physical activity. Protecting facilities that support physical activity within worksites is important in terms of occupational and public health.

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**Figure 1** The new employee car park that was once a tennis court. The tram and baseline are now replaced by parking-bay lines (photo by Tanya Trayers).

## REFERENCES

- 1 Department of Health. At least five a week. Evidence on the impact of physical activity and its relationship to health. A report from the Chief Medical Officer. London, 2004.
- 2 Department of Health. *Health Survey for England*. <http://www.dh.gov.uk/PublicationsAndStatistics/PublishedSurvey/HealthSurveyForEngland/ts/en> (accessed 3 March 2007).
- 3 British Medical Association. *Road transport and health*. London: British Medical Association, 1997.
- 4 Hoehner CM, Brennan-Ramirez LK, Elliott MB, *et al.* Perceived and objective environmental measures and physical activity among urban adults. *Am J Prev Med* 2005;**28**(2 Suppl 2):105–16.
- 5 Zimring C, Joseph A, Nicol GL, *et al.* Influences of building design and site design on physical activity: research and intervention opportunities. *Am J Prev Med* 2005;**28**(2 Suppl 2):186–93.
- 6 Yancey AK, McCarthy WJ, Taylor WC, *et al.* The Los Angeles lift off: a sociocultural environmental change intervention to integrate physical activity into the workplace. *Prev Med* 2004;**38**:848–56.
- 7 Librett JJ, Yore MM, Schmid TL. Local ordinances that promote physical activity: a survey of municipal policies. *Am J Public Health* 2003;**93**:1399–403.