

Why Poor Women Don't Deliver at Health Facilities in Developing Countries? A Comparison of Economic and Cultural Barriers

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Although significant progress has been made in reducing global maternal mortality by almost 50% from 546,000 in 1990 to 287,000 in 2010 (WHO 2012), in many countries the Millennium Development Goal of reducing maternal mortality by three-quarters by 2015 (MDG-5) may not be achieved (Rasch 2007). The two main interventions to prevent maternal mortality - delivery by skilled birth attendants (SBA) and seeking emergency obstetric care (EmOC) from health facilities are underutilized, particularly by poorer segments of population. Economic barriers and limited access to quality services are considered the major determinants of low utilization of maternal health care (Gabrysch and Campbell 2009). Among all health indicators, the largest inequality pervasively persists in maternal health care utilization (Houweling and Ronsmans 2007).

Hart's decades-old *law of inverse care*, which states that the wealthy are more likely to receive care than the poor (Hart 1971) has, unfortunately, held up quite well over the years especially for maternal health as recent studies have shown (Gage 2007; Kiwanuka, Ekirapa et al. 2008; McNamee, Ternent et al. 2009).

Recently, Results-Based Financing has emerged as an innovative mechanism to increase demand and improve supply of health services (Eichler and Levine 2009). On the demand side, an increasing number of countries are providing cash incentives to women to seek antenatal care and deliver in health facilities (Lagarde, Haines et al. 2007; Fiszbein and Schady 2009). On the supply side, health facilities and providers are also receiving financial incentives linked to good performance in delivering maternal and child services (Meessen, Musango et al. 2006).

All these economic incentive based programs are based on the assumption that the huge inequality in maternal health care utilization in the poorer segment of women is primarily due to economic barriers to accessing care. The current fad of jumping on the bandwagon of supporting incentive based financing by the donors has been recently questioned (Soeters and Vroeg 2011). A key question remains: Is economic barriers the main reason for poor women not seeking delivery care skilled birth attendants or at health facilities?

Using Demographic and Health Survey (DHS) data from developing countries, we examine the reasons for women not delivering at health facilities.

Data and Method:

The study uses data from Demographic and Health Surveys (DHS), which are nationally representative surveys that use standardized questionnaires to collect extensive information from women of reproductive age (15 to 49 years). The DHS obtains information on women's contraceptive use behaviors, birth history, fertility patterns, and maternal health service utilization for the births that occurred in last 5 years. In 24 countries, DHS collected information of the reasons for not delivering at

health facilities. We present the percent distribution of the main reasons for not delivering at health facilities. The main reported reasons are "cost too much"; "facility not open" at the time of delivery; the facility is "too far/no transport" available; "don't trust/poor quality" of the service; "no female provider" available; "Husband/family did allow"; perceived as "not necessary" or "not customary"; and, "Other" causes.

We use meta-analytic techniques to combine and summarize the results from multiple countries. Considering the significant heterogeneity among the countries, we use random effects models using the Der Simonian and Laird method. We show the results for each major reason of not delivering at health facility for all women and, in particularly for poor women (those in the lowest quintile of household's durable asset score).

The samples in DHS are not selected based on simple random sampling (SRS), but using multi-stage cluster sampling method. As a result, the observations are not independent and the design-effect (deff) is likely to be more than one. All estimated variances are adjusted for $deff > 1$ and higher interclass correlation > 0 for avoiding spuriously rejecting null hypothesis. All results are weighted for complex survey design (non-proportionate sampling) and missing responses.

Results:

Figure 1 shows the main reasons for not delivering at a health facility for the recent births by all women and by poor women. Only 21.5% poor women on average had not delivered at a health facility for the high costs. In contrast, the facility was too far distanced or transportation was not available cited as the most important cause for not delivering at a health facility (38.3%; 95% CI: 28.8-47.9) by poor women.

Perception of no need was also a major cause for not delivering at a health facility (27.4% [95% CI: 18.1-36.7]). by poor women. Not a custom was also reported as another major cause of not delivering at a facility.

Less than 5% of women reported husband or other family member's objection, low quality of care or trust, and non-availability of a female provider (doctors/midwives) as the other major causes of not delivering at a facility. The response distribution for all women were similar.

The distributions of the responses for each country for each major cause of not delivering at a health facility are shown in Figure 2-10.

Only in Pakistan and Philippines about half women who did not deliver at a health facility cited high cost as the reason. Among 24 countries included in this study for which the relevant data were available, the response of cost as the barrier was reported less than 20% in about half (13) the countries.

Conclusion

Economic reason is an important reason for not delivering at health facilities in many developing countries. However, far larger proportions of women cited the lack of service availability, and social and cultural barriers as the major causes of not delivering at a health facility in vast majority of the countries.

Only economic incentives may not significantly improve delivery at health facilities, without improving the health system (Sharan et al., 2010) and removing the social and cultural barriers. Still a large proportion of women consider that the delivery at a health facility is not necessary. It now well recognized that the life threatening maternal complications may not be anticipated at advance. Clearly there is a need for improving women's knowledge about obstetric risks.

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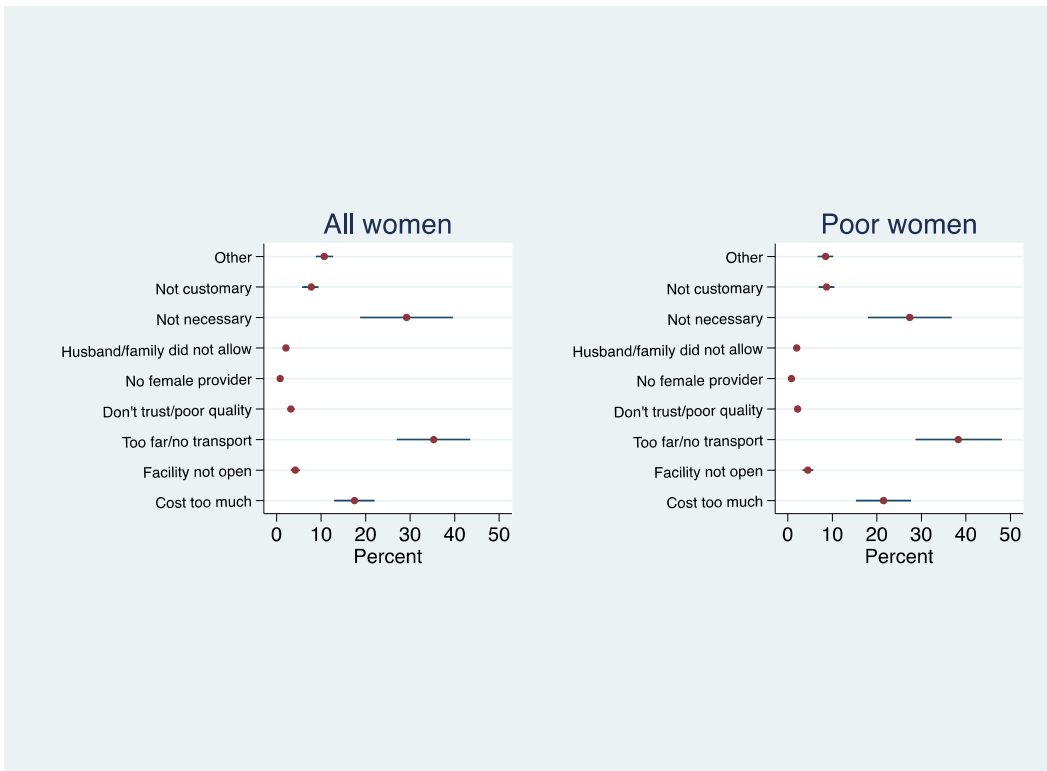
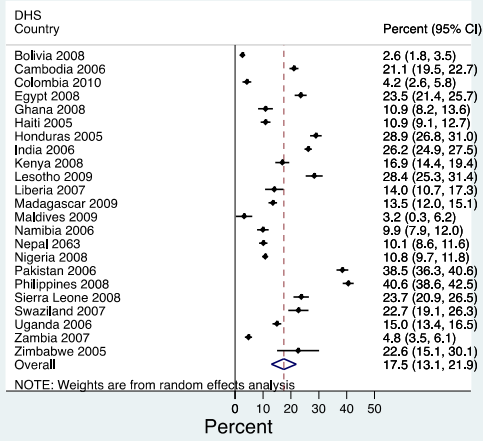


Fig. 1: Percent distribution of the causes for not delivering at a health facility (with 95% CI): summary measures from the meta-analysis results

Cost too much

All women



Poorest women

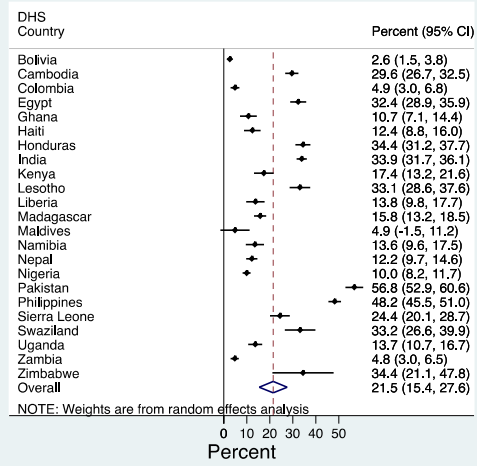
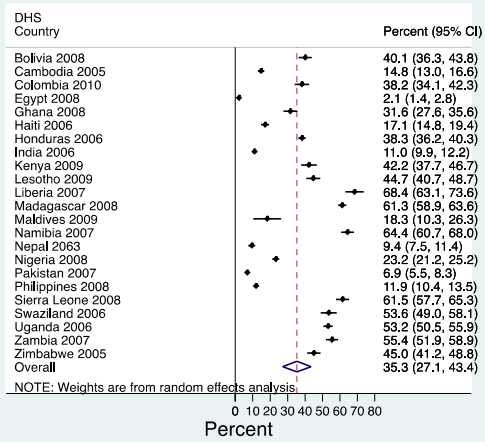


Fig. 2 : Cost too much as the reason for not delivering at a health facility

Facility too far/no transport available

All women



Poorest women

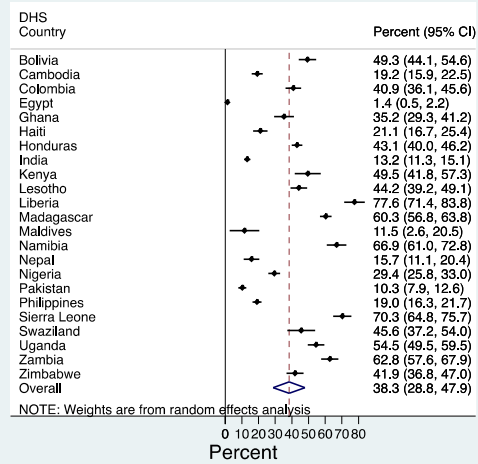
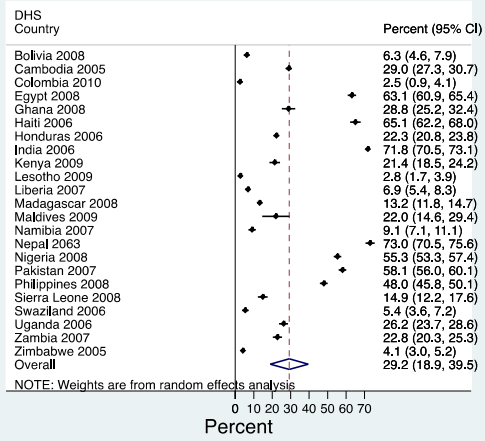


Fig. 3: Distance as the reason for not delivering at a health facility

Perceive not necessary

All women



Poorest women

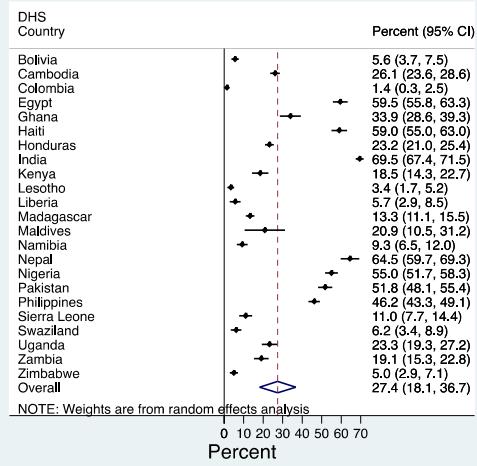


Fig. 4: Perceived no need as the reason for not delivering at a health facility

Not a custom

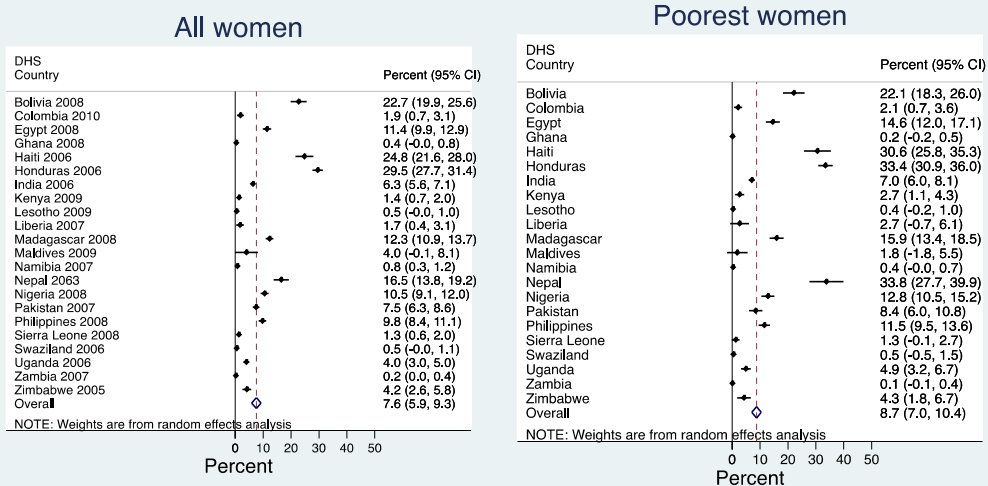


Fig. 5: Not a custom as the reason for not delivering at a health facility

Facility not open

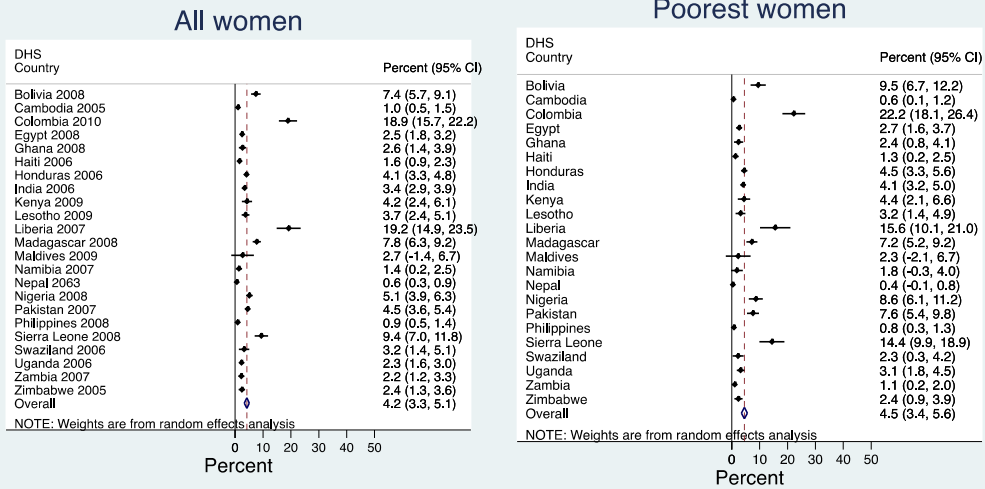


Fig. 6: Facility was not open as the reason for not delivering at a health facility

Don't trust/poor quality

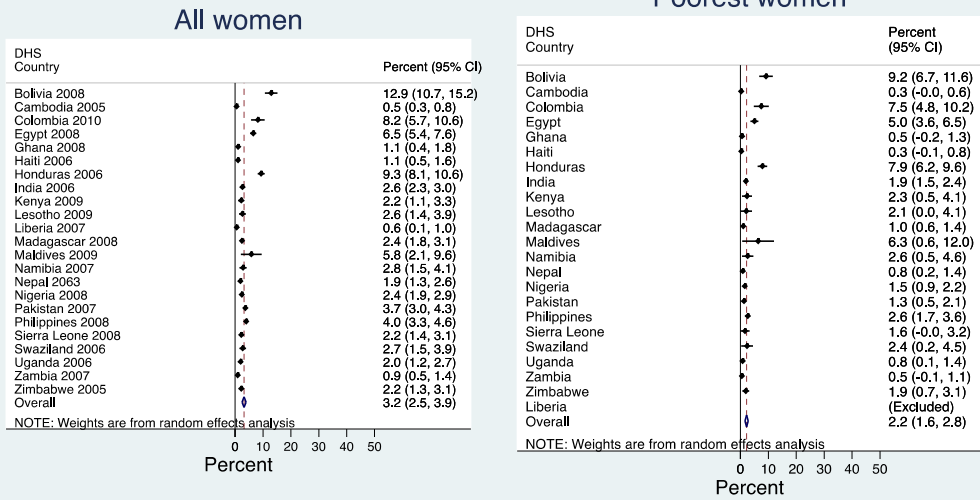


Fig. 7: Poor quality as the reason for not delivering at a health facility

Husband/family did not allow

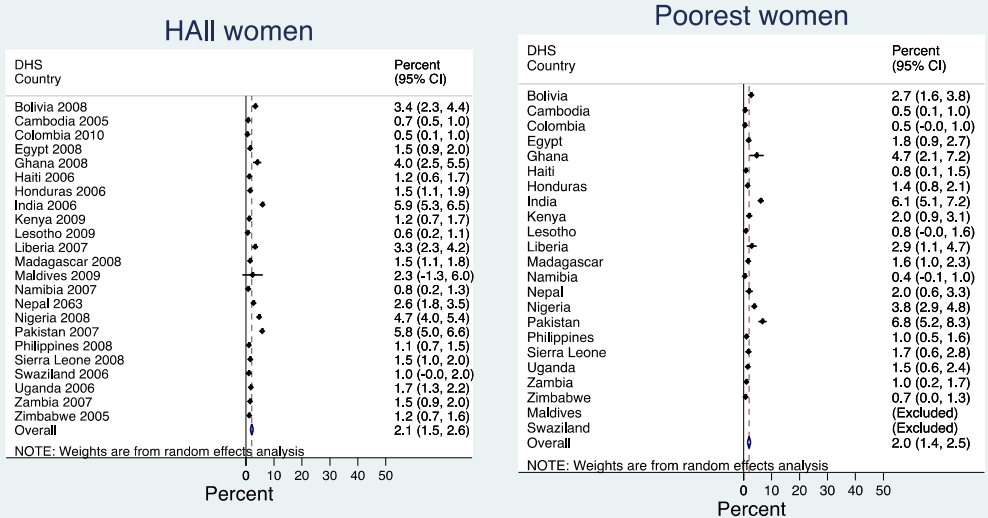


Fig. 8: Husband or family members did not allow as the reason for not delivering at a health facility

No female provider

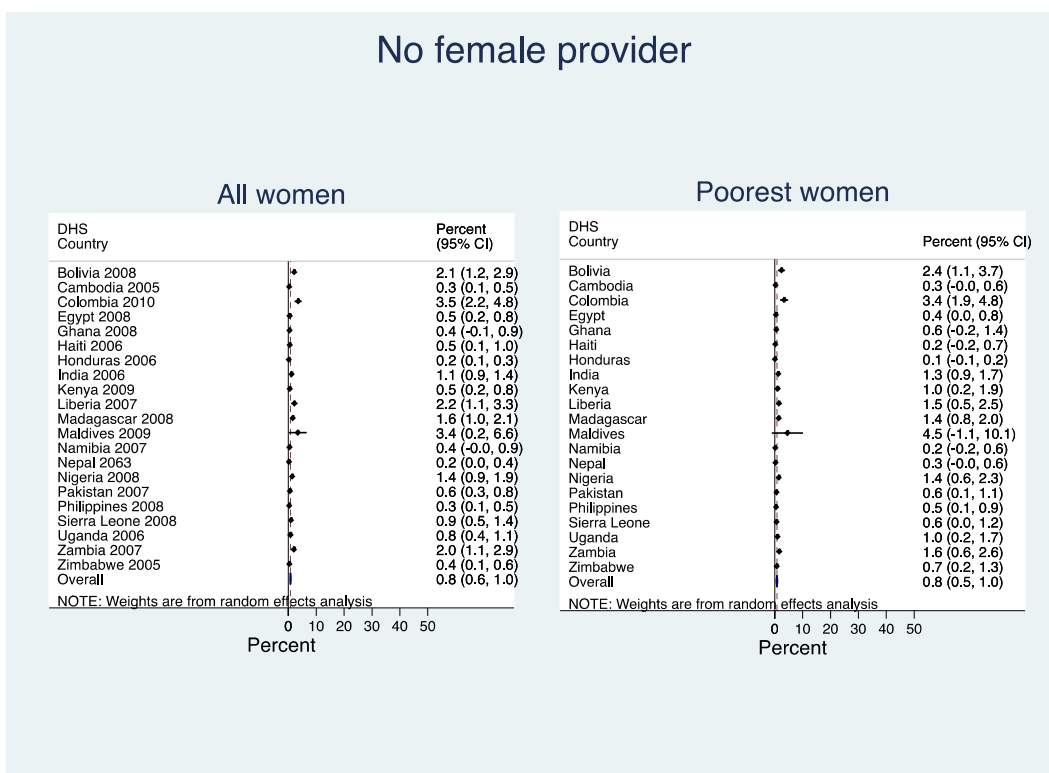
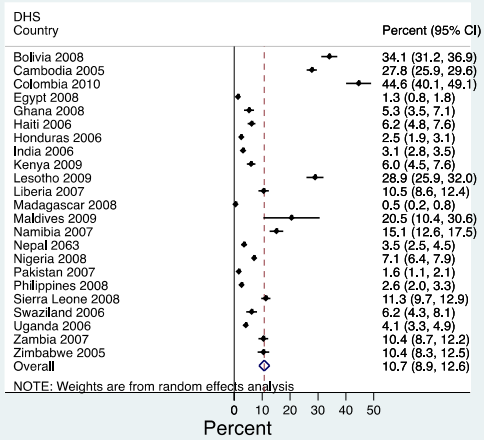


Fig. 9: Non-availability of a female provider as the reason for not delivering at a health facility

Other

All women



Poorest women

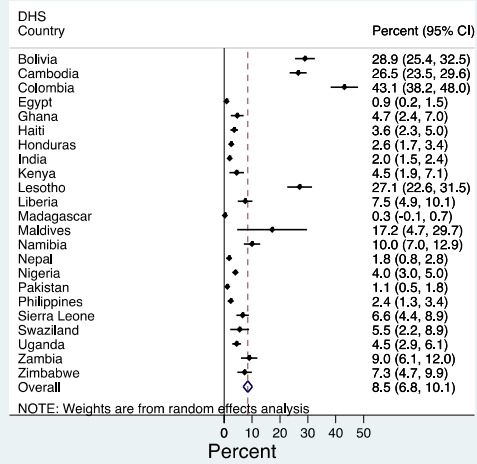


Fig. 10: Other reasons for not delivering at a health facility