ABSTRACT

Background
On a global scale, the majority of maternal deliveries occur in developing countries and Africa has the highest maternal mortality estimates by region. In Zambia, as is the situation in other developing countries, majority of births occur at home under unhygienic and unsafe conditions. These have implications for the well being of both the mother and the baby. While many studies have been conducted on home deliveries, country specific contexts of areas of concern still differ between places. Consequently, not much is known about factors associated with home deliveries in our setting.

The aim of the study was to determine the proportion of home deliveries and the factors associated with home deliveries in Nchelenge, Zambia.

Methodology
A cross sectional study design with simple random sampling was used to select 43 immunization posts out of the existing 79 outreach points. Personal interviews were conducted with 479 mothers, from whom six women were purposely selected for in-depth interviews. Four focus group discussions were conducted. Data was entered into Epi Data and exported to the statistical package for social sciences (SPSS version 17) for analysis. Descriptive statistics, chi-square test and binary logistic regression were used to determine factors associated with home deliveries. Crude odds ratios and adjusted odds ratios at 95% Confidence intervals were calculated and level of significance was set at $p=0.05$ level. Nvivo software was used to examine for qualitative perspective of factors linked to home deliveries.

Findings of the Study
Overall (n=499), response rate was 96% (< 5% refused). Most mothers attained up to Primary School level of education (84.6%) and only 4% reached upper Secondary School. The study found that 55.7% of the mothers lived more than 5 km away from the nearest health facility. While 71% of mothers were agreeable to have a home delivery, 73% thought delivering at home was unsafe.

The prevalence of home deliveries was 43% 95% CI (38.62, 47.48). Women who had four years of schooling or less, were 63% (AOR=1.63, 95% CI [1.06, 2.51]) more likely to deliver at home than a health facility compared to those who had at least five years of schooling. Women coming from households that had a combined monthly income of less than 150,000ZMK were 73% (AOR=1.73, 95% CI [1.06, 2.81]) more likely to deliver at home than at a health facility when compared to those whose household income was greater or equal to 150,000ZMK. Women who lived within a radius of 5 kilometers to the nearest health facility providing maternal health and delivery services were 39% (AOR=0.61, 95% CI [0.41, 0.90]) less likely to deliver at home compared to those who lived more than 5 km away.
Long distances to health facilities, the shortage and lack of health workers, abrupt and unexpected labor, lack of respect (actual or perceived) by health workers for mothers, being advised and following instruction, myths and traditional beliefs, the availability of traditional birth attendants and religious beliefs were given as reasons to explain what made women deliver at home.

Conclusions and Recommendations

The occurrence of home deliveries in a low income rural setting of a developing country was associated to the distances of villages to health facilities and the household incomes as well as the number of years that mothers spent in school. These observed determinants alone however, do not entirely explain the circumstances under which each home delivery occurs and thus the personal experiences of mothers and the perspectives of community members and considerations of tradition and beliefs, combined with the afore mentioned determinants offer a better understanding of what factors determine a home delivery in Nchelenge, Zambia.
This work is dedicated to all mothers who endure so many hardships especially in remote areas while they are expecting their babies.
ACKNOWLEDGEMENTS

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## ACRONYMS AND ABBREVIATIONS

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<tbody>
<tr>
<td>ANC</td>
<td>Antenatal care</td>
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<tr>
<td>CSO</td>
<td>Central statistical office</td>
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<tr>
<td>DHO</td>
<td>District Health Office</td>
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<tr>
<td>FIGO</td>
<td>International federation of gynecologists and obstetricians</td>
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<td>HMIS</td>
<td>Health Management Information Systems</td>
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<tr>
<td>ICM</td>
<td>International confederation of midwives</td>
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<tr>
<td>IIPS</td>
<td>International Institute for Population Sciences</td>
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<tr>
<td>IRIN</td>
<td>Integrated Regional Informational Networks</td>
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<tr>
<td>NBS</td>
<td>National Bureau of Statistics</td>
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<tr>
<td>NIPS</td>
<td>National institute of population studies</td>
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<tr>
<td>NPC</td>
<td>National population commission</td>
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<tr>
<td>TDRC</td>
<td>Tropical diseases research centre</td>
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<tr>
<td>UNICEF</td>
<td>United Nations children’s fund</td>
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<td>UNFPA</td>
<td>United Nations population fund</td>
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<tr>
<td>WHO</td>
<td>World health organization</td>
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<tr>
<td>ZMK</td>
<td>Zambian Kwacha</td>
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