A Systematic Appraisal of the Factors Influencing Antenatal Services and Delivery Care in Sub-Saharan Africa

Nancy Innocentia Ebu
University of Cape Coast
School of Nursing, Ghana
Commonwealth Nurses Conference
March, 2014 – Royal College of Physicians, London
Acknowledgement

• Authors of all the literature I used

• University of Cape Coast

• Organizers of the event
Background

• Maternal mortality is an issue of global health concern

• In 2012, United Nations report indicated that 287,000 women died due to pregnancy, delivery and postnatal causes
Background

- 56% of the cases occurring in Sub-Saharan Africa
- 29 percent in Southern Asia in 2010, and accounting for a total of 245,000 maternal deaths (United Nations, 2012)
- Millennium Development Goal (MDG) five
- Countries are expected to make progress towards meeting the target by 2015
Background

• The World Health Organisation (WHO) has recommended at least four ANC visits for pregnant women (WHO, 2010)

• The proportion of women who had enough ANC visits had seen a reduction in Sub-Saharan Africa between 2000 and 2010 (United Nations, 2012)
Fig. 1: Trend Analysis of Utilization of ANC
Background

• Many women in the developing world carry pregnancy to term and deliver without accessing ANC services (Gage and Calixte, 2006)

• Disparities persist in sub-Saharan Africa where maternal death is high due to inadequate access to skilled personnel during delivery (United Nations, 2010)
Purpose of the study

• This systematic appraisal sought to investigate the factors influencing access to antenatal services and delivery care among women of childbearing age in Sub-Saharan Africa.
Specific research questions

• What are the different factors influencing access to antenatal services and delivery care in sub-Saharan Africa?

• To what extent does antenatal care influence hospital delivery?
Methods

• Relevant studies retrieved from CINAHL, MEDLINE, ASSIA, and PUBMED from February to April 2012

• Key words used: antenatal, prenatal, delivery, care, childbirth, access, utilisation, maternal health
Quality assessment checklist criteria

• Studies published in English
• In peer reviewed journals
• Since 2001
• Conducted in sub-Saharan African country
• Survey design
• Population - Women of childbearing age 13 - 49 years
• Sampling described
• Data collection procedures described
• Data analysis explicit
• Results discussed
• Ethical issues mentioned
• Findings including information on access to antenatal and delivery care
<table>
<thead>
<tr>
<th>Author and Place of Publication</th>
<th>Publication Title</th>
<th>Study number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tann, C. J., Kizza, M.,</td>
<td>Use of Antenatal Services and Delivery Care in Entebbe, Uganda: A Community Survey. BMC Pregnancy and Childbirth 2007, 7:23</td>
<td>S1</td>
</tr>
<tr>
<td>Morison, L., Mabey, D.,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Muwanga M., Grosskurth, H.,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elliott, A.M. (Uganda)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eijk van, A. M., Bles, H. M.,</td>
<td>Use of Antenatal and Delivery Care Among Women in Rural Western Kenya: A Community Based Survey. Reproductive Health 2006, 3:2</td>
<td>S2</td>
</tr>
<tr>
<td>Odhiambo, F., Ayisi, J. G.,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blokland, I. E., Rosen, D. H.,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adazu, K., Slutsker, L. and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lindblade, A. K. (Kenya)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mbaruku, G. Kruk, M. E.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Tanzania)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Author(s)</td>
<td>Title</td>
<td>Journal</td>
</tr>
<tr>
<td>------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
Data extraction

- Names of the authors
- Year of publication
- Country
- Focus of the study

Methodology issues - sampling techniques, type of instrument for data collection, whether informed consent was obtained

Outcome measures of interest

- Number of antenatal visits
- Place of delivery
- Level of education
- Income
- Distance to health facility
Possible sources of bias

• Only quantitative studies

• Limited to publications in English

• Further limitation of the publication year to 2001

• Data extraction was conducted by one person
Meta Analysis of ANC Attendance and Percentage of Non-Hospital Deliveries

Studies and Sample Sizes

- S1(n=413)
- S2(n=635)
- S3(n=1204)
- S4(n=392)
- S5(n=392)
- S6(n=100)

Data

- % of ANC
- % of Non-Hospital Deliveries
Results

• Results of five studies indicate that 84% to 96% women had at least one ANC visit during pregnancy

• Women with more years of education were more likely to use ANC services in non-government health facility Odds Ratio (OR 3.32, 95% CI 1.84-6.00)
Results

• Women with no formal education or fewer years of education were more likely to seek care from TBA`s (OR=3.07; 95% CI=1.49-6.31)

• Results of four studies showed low use of hospital delivery. One study reported that Christians were more likely to use institutional delivery facilities compared to Moslems and traditional worshippers (p<0.05)
Discussion

• Educated women with partners who are highly educated were likely to use ANC services and is consistent with the results of Charkraborty et al. (2003) Navaneetham and Dharmalingam (2002)

• The poor road system and inadequate transportation opportunities in most rural parts of sub-Saharan Africa are possible barriers to effective healthcare delivery (United Nations, 2010, Titaley, Dibley and Roberts, 2010)
Discussion

• Pregnant women in rural communities have greater chances of delivering in a non health facility assisted by friends and other family relations (Zere et al., 2010)

• Few studies demonstrate a correlation between women of Muslim and the Catholic faith and use of maternity services (Addai, 2000, Overbosch et al., 2004)

• Implementation of free maternal health services by some governments in the developing world, for instance, Ghana and Nepal have had a positive influence on improving financial barriers to care (Witter et al., 2007)
Implications

• Maternal health care - a key priority by all governments in Sub-Saharan Africa
• Higher priority on education of the female child and women in general
• Maternal health policies to remove financial and physical barriers
• Improving the socio-economic environment
• Health care providers need to educate women on the importance of ANC and delivery with skilled personnel
• Health care workers need to be more sensitive towards clients
Conclusion

• Access to ANC services and delivery care are influenced by;
  • Women’s and partner’s sociodemographic characteristics,
  • Education and economic status,
  • Distance to health facility,
  • Quality of care and cost of service
Conclusion

• Access inequalities affect the health of women in sub-Saharan Africa. Promoting safe motherhood would require improving the socioeconomic and political environments that addresses the multiple barriers women encounter.
References


References


References


Thank You!