Pregnancy related deaths in Anuradhapura district 2007-2009

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Abstract

Introduction: In 1996 a review of maternal deaths in Sri Lanka had shown that some maternal deaths escape identification in the national statistics.

Objective: This study was designed to find out the escaped deaths of pregnant mothers in Anuradhapura district from 2007 - 2009.

Method: A data collection and an analytic study. Data collected from maternal death review reports (H677a & H677) from the RDHS office in Anuradhapura district (AD), of 2007-09. Data collection was done during May - July 2011.

Results: Total 41 deaths during pregnancy and post partum. Majority (44.8%) of women were in their 1st pregnancy. 51.7% of the deaths had occurred during the antenatal period. 55% of these women, who died during the pregnancy, were between 25-35 yrs of age. Leading cause of death among pregnant mothers in Anuradhapura district, during 2007- 2009, is suicide. The 2nd & 3rd leading cause of maternal death in AD in years 2007-09 were post partum haemorrhage (PPH) and heart disease (HD) complicating pregnancy. There was only one documented maternal death due to septic abortion during these 3 years.

Conclusion: According to the WHO definition of maternal deaths suicides are categorized as

"accidental or incidental cause". Therefore it is not been reviewed in the annual maternal death reviews and not taken in to the national statistics of MMR.

Introduction

According to the WHO definition maternal death is "the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes".

In 1996 a review of maternal deaths in Sri Lanka had shown that some maternal deaths escape identification in the national statistics. Therefore this study was designed to find out the escaped deaths of pregnant mothers in Anuradhapura district from 2007 - 2009. For the year 2010 maternal death review reports were unavailable at RDHS office in Anuradhapura district, as the reviews were in progress.

Methodology

A retrospective study from data collected from maternal death review reports (H677a & H677) from the RDHS office in Anuradhapura district (AD), for 2007-09. Data collection was done during May - July 2011.

Results

Total number of reported deaths, during pregnancy, in years 2007-2009 in Anuradhapura District was 41.

Figure 1.

Figure 2.
When the death occurred during pregnancy

Figure 3.
Maternal deaths according to age

Figure 4.
Cause of deaths among pregnant women in AD in 2007-2009

Figure 5.
Causes of suicides, leading to death, among pregnant mothers in AD .

figure 6: suicidal deaths related to parity, marital status & time of death during pregnancy

Figure 7: suicide rates in Sri Lanka⁷

Discussion

There were 41 documented maternal deaths in years 2007-2009 in Anuradhapura district (RDHS office & statistics unit ATH). Majority (52%) of maternal deaths in Anuradhapura district in 2007 - 2009 have occurred during antenatal period. Compared to the Sri Lankan statistics in 2005/06 majority (57%) of maternal deaths have occurred during post natal period. Majority (44.8%) were in their first pregnancy and 55% of these women, who died during the pregnancy, were between 25-35 yrs of age.

Leading cause of death among pregnant mothers in Anuradhapura district, during 2007-2009, is suicide. The 9 deaths out of total 41 (22%) deaths were due suicides (figure 4). Three of the suicide deaths were among unmarried pregnant mothers (figure 6). Out of these women, majority (66%) had committed suicide by ingesting poison (figure 5). The time of suicide related to pregnancy had been less than 28 weeks of gestation in 6 (66%) of these women. Majority (77.7%) of them were in their 1st pregnancy.

The 2nd & 3rd leading cause of maternal death in A'pura district in years 2007-09 were post partum

haemorrhage (PPH) and heart disease (HD) complicating pregnancy. PPH accounts for 15% & HD complicating pregnancy accounts for 14% of maternal deaths in AD in 2007-09 (figure 4).

Compared to national statistics septic abortions were very low in A'pura district, during 2007-09. There was only one documented maternal death due to septic abortion during these 3 years (figure 4). While septic abortion became the 2nd leading cause of maternal death in Sri Lanka in 2006 (1). Among the suicide deaths 45% were among primi parus (during the 1st pregnancy) mothers (figure 6). Majority (57%) of these women were between 25 years-35 years of age (figure 3).

According to the WHO definition of maternal deaths suicides are categorized as "accidental or incidental cause". Therefore it is not been reviewed in the annual maternal death reviews and not taken in to the national statistics of MMR. However since suicide rates are high in Sri Lanka compared to other countries, more consideration should be given to include suicidal deaths among pregnant women, in to national statistics of maternal mortality in Sri Lanka.

Sri Lanka has the highest suicide rates in south Asia. According to the statistics maintained by the Registrar General's office, suicide rate is 33 per 100,000 population since 1990 and had remained static since then upto 2001

(figure 7). According to national statistics the rate of suicide is lower for females compared to males. In 1999 suicide rate among female was only 16 per 100,000 population and had remained more or less static since then (3, figure 7). Therefore suicide rate among pregnant women in Anuradhapura district is higher than the national rates. It is important to find out, if these pregnant women committing suicide are part of the larger suicidal prone society or the pregnancy had driven them to commit suicides. There is an urgent need to look into the social and

mental health aspects of the women while they are pregnant and during post partum period.

The primary health care system should be supported by the mental health specialists in view of training and easy referral system. The public health nurse should be trained and then utilised more, to cater for the mental health needs of the women in fertile age and during early pregnancy.

The social service department too can play a role in carrying out surveillance, and integrate their system in to the primary health care services. There is a need to develop a multidisciplinary primary health care system to cover all aspects of maternal health care in Sri Lanka.

References

1. FHB - Annual Report on Family Health – 2006/7
2. UNICEF. Prioritizing maternal health in Sri Lanka. http://www.unicef.org/devpro/46000_48498.html
3. www.statistics.gov.lk
4. Rodrigo JN, Fernando L, et al, 1996, Maternal Deaths in Sri Lanka A Review of Estimates and Causes.
5. Family Health Bureau, 2007, Medium Term Plan on Family Health.
6. Medical Statistics Unit, Department of Health, 2007, Annual Health Statistics Sri Lanka.
7. <http://www.microkhan.com/2010/08/17/suicide-in-sri-lanka/>
8. http://www.who.int/mental_health/prevention/suicide/suiciderates/en/

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