Abstract for the PAA 2004 session 103: Adolescent Reproductive health in Developing countries.

## <u>Title: The reproductive health consequences of early marriage in Sudan: findings from</u> <u>the 1999 Safe Motherhood survey</u>

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## **Introduction**

The Millennium Development Goals (MDGs), adopted at the Millennium Summit of the United Nations in September 2000, call for a dramatic reduction in poverty and marked improvements in the health of the poor. Among the specific targets include the improvement of maternal health, reduction of infant mortality, and combating the spread of HIV/AIDS (United Nations, 2000). The improvement of reproductive and sexual health among the young populations in poor countries could be a vital step towards achieving the MDGs. The young women and men of today represent the largest cohort in history. There is evidence of significant health consequences of early initiation of sexual behaviour and childbearing. Teenage childbearing has been linked to higher rates of maternal and child morbidity and mortality due to a number of adverse health effects for both the mother (including anaemia, severe bleeding, prolonged labour, premature delivery, and death) and the child (higher incidence of low birth weight, prematurity, stillbirth, and neonatal mortality) (Senderowitz and Paxman, 1985; Zabin and Kiragu, 1998).

Almost all adolescent women in Sudan who bear children do so within marriage, and early marriage is a social norm and married couples are under social pressure to have a child sooner after marriage. Therefore, it is important to study young married women reproductive health in order to develop policies and programmes to improve the health and well-being of this group of women. Effective implementation of reproductive health services for adolescents and young adults requires an understanding of the population at risk. While overall declines in teenage fertility have been well documented for much of the developing world (Blanc and Way, 1998; Singh, 1998), wide variations still persist among different population groups and strata.

## **Context**

Sudan with an area of a million square miles is the largest country in Africa. The country can be broadly divided into two great zones, the North and the South. The arid North is largely Arab, and the people of the tropical and marshy lands of the South are Pagan. Sudan is a poor country with an estimated per capita income of US\$ 330 in 1999. Agriculture employs 80% of the work force, with cotton, sesame, livestock/meat and gum Arabic accounting for most of the export earnings. In the gazing lands on either side of the Nile, people wealth lies in camel and sheep in the North and cattle in the South. However, since the discovery of Oil in 1999, the per capita income has increased dramatically nearly six times to US\$ 1970 in 2002 (UNDP, 2003).

According to the last 1993 census, there were 25.6 millions living in the North and an estimated 4.5 millions in the South. The population distribution is highly skewed with population densities ranging between 200 to 5 per sq kilometer. In 1993, 29% of the population lived in urban areas, less than 3 % were nomadic. The fertility levels were high with 45% of the population under age 14 years. This percentage has not changed in the last 20 years. The growth rate was 2.9 % during 1983-1993.

With regards to reproductive health policies and pogramme, the country supports the ICPD programme of action (POA) and has developed national population policies to deal with broad issues such as RH/FP, birth spacing, population IEC, women in development and population and poverty. The RH policies includes couples freedom in choosing the appropriate birth spacing with special consideration to mothers, making all possible arrangements for safe motherhood. It also includes provision of primary health care to satisfy the needs of safe motherhood and RH.

## **Objectives**

The main objective of this paper is to document the level of the reproductive health problems reported by ever-married young women aged 15-24 year. Specifically, the paper will focus on the following outcomes

- 1. Pregnancy loss (abortion or still birth).
- 2. Childhood mortality.
- 3. Pregnancy and postpartum complications.
- 4. Reproductive tract infections (RTI) such as abnormal vaginal discharge and urinary tract infections.

The above outcomes will be summarized by background characteristics such, mother's current age, level of education, place and region of residence, and age at marriage, parity and utilization of health care facilities.

The Sudan Safe Motherhood Survey (SMS) conducted in 1999 by the Federal Ministry of Health (FMOH) in collaboration with the Central Bureau of Statistics (CBS) with financial support from the UNFPA country office, offers a unique opportunity to address these serious problems.

# Data and method

## Data

The Sudan Safe Motherhood survey which was conducted in the North region only (the South region was excluded due to instability and civil war) employed a two state-stage cluster sampling design, with selection at the first stage of primary sampling units or clusters followed by random selection of 53 households from each cluster. The primary respondents are ever-women aged 15-49 in the selected households. A total of 16,075 ever-married women were successfully interviewed. In addition to demographic and socio-economic characteristics, the questionnaire covers the following topics: pregnancy history, family planning, maternal health, general and maternal morbidity, harmful traditional practice, cause of child death and Sexual transmitted Infections.

## Methods

Pregnancy loss (abortion and stillbirth) incidence rates will be calculated using women-years at risk of pregnancy loss, neonatal and infants mortality rates (per 1000 live birth) will be estimated using life-table techniques, proportions of women reporting any pregnancy complications or any RTI will also be calculated. Poisson and Logistic regression models will also be used to identify the significant predictors of above outcomes. Survey design (weights and clustering) will be taken into account in analysis.

## **Initial findings**

At the time of the survey, there were 3097 (19%) ever-married women aged 15-24, among them, 861 (28%) aged < 20 years. Almost all of then are currently married (96%). Education level is low, only 51% attended schools, and 41% of women aged 20-24 had more than primary education, while only 18% of women age 15-19 achieved he same level of education.

The mean age at first marriage is 16.4 years. Among currently married women, one in five were nullgravida, and two in five were childless and about one in six have three or more births.

Overall knowledge and use of contraception in Sudan is low, and only about half of young married women know one or more methods and current contraceptive use is below 10%.

Utilization of antenatal health care services by young married women is moderate, 68% received ANC during the last pregnancy andabout 55% were assisted by skilled birth attendant.

## **Policy implications**

The findings of the paper are expected to have important policy implications for reproductive health programmes in the country and specially for young women.

# **References**

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