

## **PART IV**

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### **Medical Sciences and Public Health**



# A Strategic Plan to Reduce Maternal Mortality and Morbidity in Sudan

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**Abstract:** Reproductive health in Sudan remains poor. The achievement of the millennium development goals (MDGs) 4 and 5 are unlikely by 2010 if we do not adopt a radical approach to improve maternal health across the whole maternal care pathway. This paper discusses measures to reduce maternal mortality and morbidity across the whole maternal care pathway. The paper proposes a vision, aims and objectives of a strategic plan to improve maternal health. The proposed vision is to *improve maternal health in Sudan through the integrated effort of all stakeholders across the whole maternal health care pathway*. The paper proposes multifaceted approach to strategic planning that encompasses the following; measures to empower communities and individuals resulting in the development of the concept of the expert patient; measures to tackle the shortfalls of maternal health services through the development of integrated care pathways that cut across primary, secondary and tertiary health care; measures to reduce maternal health inequalities; and measures to measure maternal mortality through developing a maternal mortality national audit.

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## 1 Background

Reproductive health in Sudan remains poor. The Sudan Household Survey, Federal Ministry of Health, 2006 has reported that maternal mortality rate is 1107 per 100,000 live births. The achievement of the Millennium Development Goals 4 and 5 are unlikely by 2010 if we do not adopt a radical approach to improve maternal health across the whole maternal care pathway.

Although, there have been scattered initiatives to improve maternal health such as increasing the number of village midwives, the increase of Maternal and Child Health (MCH) coverage through training medical assistants to provide antenatal care, and family planning services at health centre level, these initiatives are insufficient to tackle the wider determinants of health which contribute to poor maternal outcomes.

Adopting a strategic, multi-faceted approach to plan maternal health will ensure reduction in maternal mortality and morbidity and bridge the inequality gap. Furthermore, this approach will enable effective coordination and partnership working of all stakeholders who are directly and indirectly involved in improving maternal health in the Sudan.

## 2 Aim of Paper

This paper outlines a strategic multifaceted approach to planning maternal health in the Sudan. As maternal ill health is a multi- dimension problem, the main essence of this approach is effective partnership working to tackle the problem from various dimensions. This approach takes an account of the wider determinants of health, such as poverty and geographical isolation, as an important contributory factor for poor maternal outcome.

## 3 The strategic multifaceted approach to maternal health planning in the Sudan

This approach is based on developing preventative and monitoring measures around an integrated care pathway for maternal health. Ideally, the care pathway should start before pregnancy and

should include raising awareness and providing information on how to stay healthy during pregnancy. Other steps in the care pathway are antenatal care, planned care, and emergency obstetric care. In addition, the wider determinants of maternal health such as poverty, geographical isolation and unsafe environment should be addressed; as should training and workforce development and retention.

#### **4 The vision, aim and objectives of the strategic multifaceted plan**

The vision is “To improve reproductive health in Sudan through the integrated effort of all stakeholders across the whole reproductive health care pathway”.

The main aim is that every mother and child in Sudan is able to receive good standard and equitable antenatal, neonatal and child health care.

The strategic multifaceted plan has four objectives, with the ultimate long-term outcome of reducing maternal mortality and morbidity.

##### **4.1 Objective one: To empower individuals and communities through the following initiatives:**

- To raise public awareness of the major maternal and child health issues
- To teach the public how to identify and manage minor maternal and childhood problems using simple measures; that is to say developing the concept of an expert patient
- To inform the public when, where and how to seek further health support and help
- To increase access and uptake of antenatal care and childhood immunization

These measures can be achieved through developing a reproductive health communication and community development unit. The ultimate goal of this unit would be to empower the public, raise awareness about minor maternal health ailments, simple preventative measures, and when and how to access health services.

The unit would achieve its objective through the development and coordination of an ongoing media campaign to raise awareness on maternal health issues, nutrition during pregnancy, and how, when and where to access help. Also on child health issues such as immunisation, diarrhoeal diseases, developmental stages and simple childhood nutrition based on the local diet and minimal cost. This campaign is to be planned and delivered through partnership with the media and the Ministry of Culture and Education in addition to the Ministry of Health. The campaign needs to run all year round utilising multiple venues such as radio, television, newsletters, journals and community leaders.

##### **4.2 The anticipated outcomes are**

1. Higher public awareness of major maternal and child health issues
2. Increase access and uptake of antenatal care and childhood immunisation
3. To inform the public when, where and how to seek further help (access and empowerment)
4. Reduction of unhealthy practices e.g. female genital mutilation.

##### **4.3 Objective two: To tackle the shortfalls of maternal health services through**

- Ensuring hospitals and equipments are in line with current agreed standards.

- Ensuring effectiveness of health care
- Appropriate workforce planning and development

This objective can be achieved through developing a clinical effectiveness unit. The ultimate aim of this unit is that every mother in Sudan should be able to receive a minimum standard of antenatal care through a standard package of care delivered across the whole country. This package is to be based on available resources and augmented by a more informed population achieved through the ongoing media campaign. The main work plan of this unit would be:

- To review and upgrade hospitals to ensure that equipments and consumables meet the minimal required standard of care. Similarly, review of equipments at primary care level, village midwife and traditional birth attendants to enable them to deliver a minimum standard of care package at each level.
- To develop a minimum package of antenatal care (this package needs to be adapted to various levels of care; primary care, village midwifery and secondary care, and even the level of the traditional birth attendant. This will include the development of a blanket risk assessment tool in addition to the standard antenatal care package.
- To map the current health visitors/ midwifery workforce and to develop a standard national curriculum of certified midwives with the aim of increasing the number of fully qualified midwives and health visitors. There is also a need to identify the knowledge and training needs of traditional birth attendants and provide them with the minimal needed knowledge and skills.

The unit can achieve these objectives through effective partnership between the Ministry of Health, the Society of Obstetricians and Gynaecologists, academic partners from midwifery, nursing and medical schools.

#### 4.4 The anticipated outcomes are

1. The development of a minimum antenatal care package, supported by a standard risk assessment tool.
2. The development of a standard curriculum of the village midwife, thus a standard level of skills and knowledge.

#### 4.5 Objective three: to bridge the maternal health inequality gap through

- Health service reform with clear shift towards prevention and strong primary and community care
- Expansion of MCH in rural and remote areas using an integrated care pathway approach which covers home birth/care, health centre level, local and district hospitals.

These objectives can be achieved through a dedicated unit that champions the development of maternal and child health in remote and rural areas in an integrated care pathway fashion across homecare, services at the health centre level, at local and district hospitals level. The unit would achieve its objectives through the following work streams:

- To map and contrast the available MCH services in remote and rural areas of Sudan to the population and their health needs in the catchment area to inform service redesign.
- To develop standard care pathways and protocols for the level of care that can be delivered at home, at the health centre level and at the local and district unit.

#### 4.6 The anticipated outcomes are

1. Reduction in the maternal health inequality gap.
2. More health services in remote and rural and more deprived areas
3. Better access to antenatal care services, especially in remote areas.
4. Integration and standardization of maternity services.

#### 4.7 Objective four: Monitoring and evaluation of maternal health

The main aim is to develop maternal and child death national audits. This can be achieved in two stages:

Stage 1: statutory notification of maternal death and child death, under 5 years, with minimum data sets such as age, place of residence place of death and cause/s of death to be developed by the Federal Ministry of Health. This can take place as part of statutory notification of all deaths.

Stage 2: When the statutory notification system achieves good coverage, it can be expanded to an investigative audit approach (a confidential enquiry) using a standard investigation and reporting tools across the country with an emphasis on lessons learnt and practical measures to reduce the avoidable causes of death.

#### 4.8 The anticipated outcomes are:

1. Initially, data would routinely be available on numbers/rates of maternal and child deaths, their geographical locations, place of death and causes of death.
2. At a later stage, a national audit investigating care provided across the whole care pathway with periodic reporting to communicate lessons learnt, and planning action to eliminate/ reduce the avoidable causes of death in the future.

## 5 Conclusion

In conclusion, maternal ill health, especially maternal mortality, is a complex problem with health, economic, political, cultural and geographical dimensions. To be able to make a measurable progress towards reducing maternal mortality and morbidity, there is a need for a strategic planning approach with multifaceted interventions across a whole care pathway. The care pathway should take into account the wider determinants of health such as illiteracy, poverty and geographical isolation, in addition to the health dimensions of training and workforce development, equipment and good quality of clinical care available to all, within existing resources.