

Review Article

Maternal morbidity care in Sudan is substandard

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Abstract

With the decline of maternal mortality levels and the increasing life expectancy at birth associated with increased family planning (FP) care, maternal morbidity assumed greater importance. The aim of the article is therefore to review the significance and magnitude of specific maternal morbidities in Sudan, such as female genital mutilation (FGM), vesico-vaginal-fistulae (VVF), STI/HIV/AIDS, infertility, cervical cancer and violence against women. Quality of reproductive health (RH) care is emphasized. The implications of rising health care costs are realized. The negative influences of implementing the peace agreements are stressed. The use of maternal morbidities as indicators of maternity care services are highlighted, while realizing the problems of maternal mortality assessment

Keywords: services, quality, costs, indicators

Introduction

The International Cairo conference on population and development (ICPD) recommendations highlighted women health and gender issues⁽¹⁾. In Sudan, maternal mortality (MM) being still high, providing emergency obstetric care (EOC) is a major

concern. It is emphasized in education and training activities. Antenatal care and gynaecological services are not receiving enough attention in obstetric and gynaecological units. Obstetric and gynaecological morbidities do not receive enough attention in practice. Inadequate resources may determine the type of care to be offered. Even attitudes of health care personnel do influence health care seeking behaviour. Women, particularly the poor, a majority in developing countries, suffer in silence, referred to as the "Culture of Silence"⁽²⁾. The level of competence of health care providers also affects attendance for care. Cost recovery may hinder seeking care for non-pressing health problems. Menopause, cardiac disease and diabetes mellitus are increasing. Breast, genital prolapsed, cervical and uterine cancers are also increasing.

The aims of the article is to arouse concern over women's morbidities and the need for better quality of gynaecological services, at an affordable lower cost, and need for generation of reliable data

Sources of data

1. Local data
2. Agencies sources
3. Literature
4. Internet

Selection of information

Local information about obstetric and gynaecological morbidities is limited to official health reports and conference

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proceedings. Limited peer-reviewed information on locally important health issues is reviewed. Hidden morbidities such as violence are highlighted. Such problems need greater attention with regard to data-handling, research and publications and improved services.

Compilation and interpretation of data

Anaemia is a cause of major obstetric morbidity. A field study on nutritional anaemia during pregnancy was presented to the 21st OB/GYN Congress in February 2007. Its prevalence was 77.1%, iron deficiency being 68.9%⁽³⁾.

The VVF problem is a major humanitarian and social concern⁽⁴⁾. One VVF center is established in Khartoum in the name of Dr. Abbo who dedicated most of his career to helping such patients; a second in Gezira and a third in the west, with difficult terrain, long distances and poor transportation, in addition to being a seat of an armed conflict. Prevention will reduce the magnitude of such serious morbidities such as VVF and will save the gynaecologist the effort and frustration of operating on such cases.

As to infertility care, Sudan has two IVF private centers and a public-private clinic. An IVF cycle costs about \$3,000, the worldwide average being US\$ 3,518. In the US however, the cost reaches \$9,500⁽⁵⁾. In UK the NHS supports investigating three cycles. The priority of funding such a service is debated⁽⁶⁾. Comparatively, Sudan's costs should be reasonably reduced. Preventing the problem is the right approach, however⁽⁷⁾.

Recent technological developments in prevention and management, for instance of cervical cancer, encouraged caring for such patients. Cancer surgery was difficult to undertake, with disappointing results.

Medical treatment is replacing surgical interventions, with less operative risks.

Cervical cancer screening may be done opportunistically. Managing it depends on the competency of the gynaecologist. The cost of treatment, for example by radiotherapy, may not be affordable, most patients being poor⁽⁸⁾. Health insurance and Zakat Department funds may help. The government provides about 50% of the Khartoum Cancer Center's budget. One study presented to the 2006 OB/GYN meeting, involved medical and paramedical personnel in screening the cervix, using acetic acid, with referral services⁽⁹⁾.

The human papilloma virus (HPV) vaccine raises hope. A Jordanian study on 1,176 women aged 18-70 years, however found no infection with HPV or cancer cervix. Dysplastic changes were rare⁽¹⁰⁾. In the UK, with a successful cervical cancer screening, a significant proportion of women has not been screened; even those with abnormality may not attend for colposcopy. The reasons are administrative, unavailability of female screeners, inconvenient clinic time, lack of awareness or believing not to be at risk and the distress of having cancer⁽¹¹⁾. Such experiences are useful if a cancer screening is to be started. In Wad Medani, Sudan treated female gynaecological malignancies during 1999-2005 were 20.5% of female malignancies. The highest percentage was for ovary 41%, breast 36.7%, cervix 34%, uterus 13.8%, chorion carcinoma 7.9%, vulval 2.9% and vagina 0%. The average age of patients was 52.5%⁽¹²⁾.

Considering mortality and morbidity of women, gender issues become significant. Unfortunately, worldwide, most women are powerless, lacking authority and RH rights, necessitating advocacy, appropriate policies

and strategies. The EMRO's (BDN) with interest-free loans and training achieved income generation and alleviated poverty. Women attained higher prestige and leadership roles in handling community affairs⁽¹³⁾. Women's education reflected a strong association with their community health status. Gender equity and basic training of health personnel were promoted. The Arab women key morbidities have socio-cultural contexts, particularly relevant to maternal and child health. A holistic policy perspective provides a solution⁽¹⁴⁾.

In Sudan, FGM is a serious cause of morbidity and mortality. Its prevalence is as high as 95% in the North and 31% in the South⁽¹⁵⁾, causing serious morbidity. It is not however a cause of increased perinatal death, as shown by a study in migrants⁽¹⁶⁾.

It is also not a cause of obstructed labour and does not indicate caesarean section (CS). However, it causes perineal injuries. A MM study in western Sudan highlighted the intra and post partum problems caused by infibulation, a radical form of circumcision⁽¹⁷⁾. At present a 10-year strategy of legally forbidding FGM is to be in-acted in the first half of 2008, then fully implemented in a decade.

A study of circumcision among female medical students was presented to the February OB/GYN scientific meeting⁽¹⁸⁾. It involved 473 respondents, randomly selected, using a multistage sampling technique; 75.3% were circumcised, believed too high for such a category, 21.15% by infibulation and 66.8% by Sunna type (less drastic), but only 48.15% of the samples' sisters were circumcised. The age at circumcision was 5-10; 66.6% done by midwives, 72.35% at home; 87.3% would not support it and will not perform it on their

daughters or patients, meaning declining prevalence and changing attitudes.

Eliminating FGM and preventing VVF need serious action. Cervical cancer screening is needed; field screening by paramedical staff is feasible.

As to HIV/AIDS promoting moral behaviour, voluntary counseling and testing (VCT), prevention of mother-to-child-transmission (MTCT) is to be promoted and condom-use encouraged.

Violence as an RH element is a current concern. Sexual violence, a result of gender inequality, is a feature of armed conflicts and displaced populations. It is widespread and an important cause of mortality and morbidity. It is a major public health problem (WHO, RH&R). It is a hidden burden against women⁽¹⁹⁾. Worldwide 210 million women become pregnant annually, 80 million pregnancies being unintended or unwanted (WHO, FRH, 2004). Furthermore 26.5 million pregnancies occur because of inappropriate use or failure of contraception (WHO, 2003). Quality management, especially for post-abortion cases, ensuring appropriate contraceptive use, is a necessity⁽²⁰⁾.

A study was done in Sudan, between October 2001 and February 2002, at a health center, using a self-administered questionnaire, covered 394 illiterate married women, 164 of whom, reported abused (41.6%), 27 of them were pregnant (16.1%)⁽²¹⁾. A WHO multi-center study, at 15 sites and 10 countries not including Sudan, listed 15 recommendations to strengthen commitment and action on violence against women⁽²²⁾.

The life cycle concept divides women's life into four periods, the last being the menopause which is becoming longer in

duration, considering improved socio-economic status, improved health care, increased coverage with and utilization of FP services. Osteoporosis assumes greater importance now; the costs of caring for hip fractures of senior women are globally realized to be too high⁽²³⁾.

Sourcing health care costs are realized. Health sector reforms include cost-recovery, decentralization, integration, population/FP and privatization. However organizational measures may negatively influence RH care delivery, particularly FP/EOC⁽²⁴⁾. Rescheduling ANC visits is one aspect of reorganization⁽²⁵⁾.

User-fees are widespread may be unauthorized, have many drawbacks as regards financial management, verticality and encouraging gainful procedures such as CSs⁽²⁶⁾. They deprive poor women and children of basic care, may increase curative attendance, while exemptions are difficult to effect. With increasing cost, good RH quality is expected, with consumer satisfaction. In Sudan, the poverty level of an income less than \$1 per day, lacking food, shelter or clothing ranges from 34% to 90%. Limited micro-credit projects exist.

A current challenge is therefore to reduce health care costs on individuals and families, both in public and private sectors. Attending a public facility has a nominal charge, while support services and medical drugs, including contraceptives, may be obtained privately at high cost. However, a stock-out situation of contraceptives may occur. As a component of PHC, ANC and FP are free of charge. A normal birth and CSs are currently also free-of-charge.

The theme of the OB/GYN 2006 meeting was on evidence-based-medicine (EBM). Quality research, such as randomized-

controlled-trials RCTs, is needed. Hopefully conference papers are carefully screened beforehand to ensure quality of information. Data handling has the usual weaknesses in developing countries, in spite of the widespread availability of computers. Standards of operations (SOPs) and corresponding indicators developed are hopefully implemented. A WHO minimum list of RH indicators is to be adopted⁽²⁷⁾. Data handling by health workers need improvements.

Conclusion

Generally, RH is a comprehensive and integrated service. Its effective implementation within PHC will contribute to achieving the MDGs. However, it faces cultural, socio-economic, policy and strategic impediments. It is not conceptualized as a priority service. Both its coverage and quality are unsatisfactory. Reducing poverty and illiteracy are long-term strategies. They are interrupted by environmental disasters and armed conflicts. Privatization renders RH care inaccessible, particularly for the poor and disadvantaged groups. Even unsafe and harmful traditional practices, causing unnecessary mortality and morbidity, are not effectively and efficiently combated. Commitment, accountability and transparency are current concerns. Capacity-building mainly of leadership skills are to be promoted. Standards and indicators prepared are to be implemented. Prospective surveys are more reliable, but are more expensive to carry out. Implementation of the new Federal Ministry of Health (FMoH) RH strategy and the Road Map to reduce MM will improve the overall RH services. Publications are informative. Good RH research improves RH services.

Annex 1. WHO's FRH data-base

- Maternal mortality
- Perinatal mortality
- Low birth weight
- Coverage of care
- Unsafe abortion
- Anaemia in women
- Infertility

References

1. United Nations program of action adopted at the International conference of population and development, Cairo. 1994 Sep;4:25-28,30-2.
2. Ahmed Al Tagi. Women and suffering in silence (Arabic presentation). Proceedings of the 19th OB/GYN Congress, Khartoum, 2003 March 5-6 and July 6.
3. Amir Burhan, Moawia El Sadig. Nutritional anaemia among pregnant women in Shekan province. The proceedings of the 21st Obstetric & Gynaecology Conference. 2007 Feb .
4. Mohamed El Imam, El Hassan Mohamed El Hassan and Ishag Adam. Vesico-vaginal-fistula in Sudanese women. Saudi Med J 2005;26(2):341.
5. Smith S, Pfeifer SM, Cottons JA. Diagnosis and management of infertility. JAMA, Middle East 2004 Mar;XIV(3):46-9.
6. Jim Thornton (Editorial) NICE fertility guidelines, good news for infertile couple, but who pays the bill? BJOG, Middle Eastern Ed 2004;110:969-70.
7. Baldo MH. Letter to the Editor, Prevention of infertility at first level of care. World Health Forum 1987; 8: 478-9.
8. Hussein M. Ahmed, Kamal Hamad. Meeting on cancer prevention. The Sudanese/American society for cancer prevention, 2004 Sep .
9. Moawia El Sadig, Mutasim O. Evaluation of visual inspection of acetic acid (VIA) as an appropriate tool for screening of cancer in Shekan Province. The Obstetric & Gynaecology Society, proceedings of the 20th congress: Khartoum; 2005 February 20-22.
10. Malkawi SR, Abu Hazeem RM, Haijat BM, Hajjiri FK. Report: evaluation of cervical smears at King Hussein Medical Center, Jordan, over three and a half years. Eastern Mediterranean Health J 2004;10(4-5):676-9.
11. Fiona Fylan. Screening for cervical cancer: a review of women's attitudes, knowledge and behavior. Brit Med J Prac 1998 August; 48(433): 1509-1514.
12. Gerai AS, Mirghani M, Miskeen EH, et al. Gynaecological malignancies managed at Wad Medani Hospital (1999-2005). The proceedings of the 21st. Obstetric & Gynaecological Society of Sudan, 2007.
13. Mr. Sheikh. Basic development needs approach in the Eastern Mediterranean Region from theory to practice. Eastern Mediterranean Health J 2000;6(4):766-744.
14. Zurayak H, Sholkami H, Yunis N, Khattab H. Women's health problems in the Arab World: a holistic policy perspective. Int J Obs Gyne 1997; 589(13):766-774.
15. Mzharul Islam, M Musleh Uddin. Female circumcision in the Sudan: future prospects and strategies for

- eradication. *Int Family Planning Perspectives* 2001 June;27(2):71-76.
16. Birgitta Essen, Birgit Bodker, N-O Sjoberg, et al. Is there an association between female circumcision and perinatal death? *Bul WHO* 2002;80:629-632.
 17. Martha Campell, Zienab Abu Sham. Sudan: situational analysis of maternal health in Bara district in Northern Kordofan. *Rapp. Statist. Sanit. Mon* 1995;48:60-65.
 18. Umbelli Taha, Abu Salab M A. Female genital mutilation among medical students in Khartoum (2003), Changing attitude. *Annual Scientific Meeting of the Obstetric & Gynaecology Society*, 2006 Feb 18.
 19. Lori Helsi. Violence against women: the hidden burden. *Rapp Trimst. Statist Sanit Mon* 1993;46:78-85.
 20. Bruce Judith. Fundamental elements of the quality of care: a simple framework. *Studies in Family Planning* 1990;21(2): 61-91.
 21. Ahmed AM, Ahmed AE. A study of domestic violence among women attending a medical center in Sudan. *Eastern Mediterranean Health J* 2005;11(1-2):64-174.
 22. WHO. Multi-country study on women's health and domestic violence against women. <http://www.who.int/gender/violence/who_multidisciplinary_study/en/index.html> 15/10/2007.
 23. Pat J Phillips. Checking for osteoporosis. *Modern Medicines* 2001 Feb;18: 25-21.
 24. Internet: UNFPA: State of the Population 2002. Sector-Wide Approaches and Health Sector Reform. www.unfpa.org:81/swaps/tools.htm-17K-cached <http://www.hsph.harvard.edu/ihsg/publications/>. Accessed 10.5.04
 25. Baldo MH. Review. The antenatal care debate. *Eastern Mediterranean Health J* 2001;7(6):1046-1055.
 26. Priya Nanda. Examining user-fees in health care from a Women's perspective. *Reproductive Health Matters* 2002; 10(20):127-134.
 27. Reproductive Health indicators for global monitoring. Report of the second Inter-country technical meeting (2001) WHO/RHR/01-19 Geneva. WHO 2001.