



Advocacy for free maternal and child health care in Nigeria—Results and outcomes

Friday Okonofua^{a,b,*}, Eyitayo Lambo^c, John Okeibunor^d, Kingsley Agholor^b

^a Former Honorary Adviser on Health to the President of Nigeria, University of Benin Teaching Hospital, Benin City, Nigeria

^b Department of Obstetrics and Gynecology, College of Medical Sciences, University of Benin, and University of Benin Teaching Hospital, Benin City, Nigeria

^c Former Minister of Health of Nigeria, University of Nigeria, Nsukka, Enugu State, Nigeria

^d Department of Sociology and Anthropology, University of Nigeria, Nsukka, Enugu State, Nigeria

ARTICLE INFO

Keywords:

Maternal mortality
Under-five mortality
Free maternal and child health
Nigeria

ABSTRACT

The study was designed to determine the outcome of an advocacy program aimed at implementing a policy of free maternal and child health (MCH) services in Nigeria. The team conducted a situational analysis on costing of MCH services, and used the results to conduct public health education and advocacy. Advocacy consisted of public presentation on MCH to high-level policymakers, dissemination of situational analysis report, and media publicity. The implementation of free MCH services at national and sub-national levels was assessed 3 years after. The results showed that the number of States offering comprehensive free MCH services increased from four to nine; the States offering partially free MCH services increased from 11 to 14 (8.1% increase); while those not offering any form of free treatment decreased from 22 to 14 (21.7% decrease). We conclude that advocacy and public health education is effective in increasing the commitment of policymakers to provide resources for implementing evidence-based maternal and child health services in Nigeria.

© 2010 Elsevier Ireland Ltd. All rights reserved.

1. Introduction

With a reported maternal mortality ratio of 608 per 100,000 live births [1] and the 2008 Nigerian Demographic and Health survey (NDHS) survey report of 545/100,000 [2], down from a reported estimate of 1100 per 100,000 live births [3] in 2005, Nigeria presently has one of the highest maternal mortality ratio in the African continent. Recent NDHS data also indicates that Nigeria has an under-five mortality rate of 157 per 1000, with an estimated one million such children dying annually [2], making her one of the fifteen countries in the world with the highest rates of under-five mortality. No doubt, the leading causes of

maternal and child death is eminently preventable through feasible solutions within the healthcare system. Some of the most pervading determinants of maternal and child health are socio-economic and cultural factors, which limit the access of pregnant women and children to essential health services. In particular, it is widely known that socio-economic factors, especially poverty are important factors that prevent women and children from utilizing available evidence-based health services [4,5,6].

Current estimates indicate that Nigeria has one of the highest concentrations of persons living in extreme poverty in the world. According to recent World Bank data, up to 71% of Nigerians live on less than one dollar a day [7]. With such a low level of income, there is very little resource for families to seek appropriate health care. Recent DHS data [2] indicate that only 64% of pregnant Nigerian women receive antenatal care; 39% are delivered by a skilled birth attendant; while only 35% of women give birth in a health facility. Similarly, Nigeria has one of the lowest rates of childhood immunization [2], while most families rely on

* Corresponding author at: Department of Obstetrics and Gynecology, College of Medical Sciences, University of Benin, Benin City, Edo State, Nigeria. Tel.: +234 802 3347 828.

E-mail addresses: feokonofua@yahoo.co.uk, wharc@hyperia.com (F. Okonofua).

unproven traditional methods for treatment of major childhood illnesses [8].

Increasingly, poverty is being recognized as the most important factor associated with the poor utilization of available evidence-based maternal and child health services in Nigeria. A study by a Presidential Task Force on Maternal Health in Nigeria [9] reported that 30% of pregnant women failed to utilize maternity services due to lack of money, while up to 49% mentioned long distances and the difficulties in obtaining a means of transportation as major obstacles to utilization of services. Two studies in southwest Nigeria [10,11] reported that the lack of funds to pay for hospital services was the most cited reason given by women using faith-based maternity services. Additionally, the 2008 NDHS [2] showed that only 8% of women from the poorest 20% of families deliver in a healthcare facility compared to 86% of women from the richest 20% of families. This is the largest equity gap on the continent, and possibly in the world, and provide further evidence that inadequate means of livelihood and poverty are critical factors associated with poor utilization of evidence-based maternal and child health services in Nigeria.

The elimination of user fees in public health institutions has been recommended as an essential safety net to improve access to health care services and reduce morbidity and mortality in developing countries [12–14]. In 2000, Kano State of Nigeria abolished the payment of user fees by pregnant women in its hospitals. A report of an evaluation carried out 1 year after, revealed that clinic attendance by pregnant women in Kano increased by over 300%, while maternal mortality declined by 50% in the hospital [15].

This result demonstrated the extent to which free maternity services can improve access to evidence-based services and reduce maternal mortality in Nigeria. A meta-analysis and as well as a scoping review [16,17] have also demonstrated similar successes in improving maternal health indicators for countries eliminating user fees not only in Africa but throughout the developing world. By contrast, a report from Burkina Faso [18] has shown catastrophic maternal health consequences when families are made to bear the costs of obstetrics emergencies.

These issues and the related analyses were brought to limelight at a Presidential Retreat on health chaired by President Olusegun Obasanjo in July 2006, where stakeholders identified the elimination of user fees as an essential short-term strategy to reduce maternal and child mortality and to achieve the Millennium Development Goals 4 and 5 in Nigeria. A Presidential Advisory Team was subsequently constituted, whose mandate included advocacy at national and sub-national levels to encourage the implementation of free services and the elimination of user fees for pregnant women and children at national and sub-national level in Nigeria.

The purpose of this paper is to present the results and outcomes of the advocacy activities carried out by a Presidential Team aimed at promoting the adoption of free treatment services for pregnant women and children in Nigeria. We believe that the analysis will provide a scientific insight into community perceptions and acceptance about this simple and practical approach for reducing the inordinately high maternal and child mortality in Nigeria.

2. Population and methods

In July 2006, a stakeholders retreat on health was convened by the President of the Federal Republic of Nigeria, whose objective was to identify ways to increase life expectancy in Nigeria. One of the papers presented at the retreat reported the high burden of maternal and child mortality [19], as a major cause of the low life expectancy in the country. Following debate and discussions, the retreat recommended a policy on elimination of user fees for mothers and children as a short-term strategy to reduce maternal and child mortality in the country. Thereafter, the President appointed an Honorary Adviser on Health, whose mandate included advocacy at national and sub-national levels to ensure the implementation of the policy.

Nigeria has a three tier system of government consisting of the Federal Government, 36 States including the Federal Capital Territory (FCT), and 774 Local Government Councils. Health care is organized with primary health centers at the base providing entry into the health system, with referrals of more serious conditions to secondary and tertiary levels of care. Constitutionally, health is on the concurrent list. By this arrangement, the Federal Ministry of Health oversees tertiary healthcare institutions as well as provide overall policy oversight and the development of strategies for the health sector. By contrast, States are in charge of secondary institutions (General and State hospitals), while Local Government Councils control primary health centers in their areas of jurisdiction. Thus, for free maternal and child health services to take effect in the country, all levels of government – Federal, States and Local Governments – must buy into the policy. Since some states were then already implementing some aspects of free treatment, it was necessary to carry out a situation analysis on costs of maternal and child health services.

Our approach to advocacy was to first conduct a needs assessment on costing of maternal and child health services in all States of the country, and then to use the results to advocate for the implementation of free services in the States.

For needs assessment, a one-paged questionnaire was developed by officials of the Federal Ministry of Health and the Office of the Honorary Adviser and validated after a series of initial consultations. The questionnaire solicited information on the priority given to maternal and child health in the States, whether any safety nets (abolition of user fees) existed for women and children who seek care in public health institutions in the States, the nature and content of the safety nets, the cost of the service to the State government and the outcomes of the policy for maternal and child health in the States. For States that do not practice free health services for pregnant women and children, we asked whether they have considered that such a policy might be useful in reducing maternal and child mortality in their states.

Teams of technical experts were constituted to visit each state to administer the questionnaire and to conduct the study. Technical team members consisted of the Honorary Adviser, officials of the Federal Ministry of Health, and members of the Nigerian Medical Association (NMA), Society of Gynecology and Obstetrics of Nigeria (SOGON)

Table 1
Situation report on costing of MCH services in the States before advocacy commenced in December 2006.

States offering free treatment for pregnant women and under 5 children	States with partial coverage of free treatment for pregnant women and children	States not offering free medical services
<i>n</i> = 4 (10.8%) Nasarawa, Balyesa, Taraba, Osun	<i>n</i> = 11 (29.7%) Rivers, Gombe, Kano, Jigawa, Anambra, Ogun, Ondo, Lagos, Ebonyi, Zamfara, Kebbi	<i>n</i> = 22 (59.5%) Borno, Adamawa, Plateau, Katsina, Bauchi, Cross River, Niger, Edo, Ekiti, Sokoto, Oyo, Delta, Kwara, Imo, Kogi, Benue, Yobe, Abia, Enugu, FCT, Akwa Ibom, Kaduna

and the Pediatrics Association of Nigeria (PAN). The aim was for the teams to visit the State Governors or their representatives, and to interview them using the validated questionnaire. The meeting with the governors served the dual purpose of raising the profile of the problem in the state as well as to conduct the survey. Thus, letters were written to inform the State Governors about the survey, and a date was requested for the teams to meet with the Executive Governors.

However, only six Governors actually met with the teams. Many Governors forwarded the request for the visit to their respective Commissioners of Health who either met with the teams, submitted detailed reports of the situation in their states, or designated senior officials in their Ministries to meet with the teams and to develop the reports. The results were then analyzed by State, and a comprehensive report written and submitted to the President of the Federal Republic of Nigeria, the Secretary to the Federal Government and the Minister of Health.

The result of the needs assessment was the major instrument for the advocacy activities carried out from February to November 2007, the outcome of which is the basis of this report.

Advocacy activities consisted of the presentation of the needs assessment report to the Federal Executive Council in March 2007, along with statistics on the poor state of maternal and child health in the country and how elimination of user fees might correct the problem. This presentation was beamed on national television. The report was then presented to a meeting of the National Economic Advisory Group, chaired by the President, and coordinated by the Governor of the Central Bank of Nigeria, and also beamed on national television. It was also presented to the National Council on Health (consisting of all State Commissioners of Health and major stakeholders on health in the country), and chaired by the Minister of Health. Thereafter, copies of the report were forwarded to all State Governors, all State Ministries of Health, and other stakeholders, such as professional associations.

Finally, the Honorary Adviser paid courtesy visits to ten states during which presentations were made to the states' Executive Councils (chaired by the Governors), and they were encouraged to implement the free maternal and child health policy in their states. For states that could not be visited, detailed letters were forwarded to the Governors, and detailed media publicity was given to the policy. The President also made public commitment to the policy and encouraged State Governors to adopt the policy.

Since advocacy began, we have kept systematic record of the status of the states regarding their full use, partial use

or non-use of a free maternal and child health policy. This information is updated every December, from information obtained from the Ministries of Health of the respective states, from media reports, as well as by confirmation from doctors who offer MCH services in the states. This report documents the practice of free maternal and child health policy in the 37 states (including the Federal Capital City) by December 2009, as compared to the situation before the advocacy began 3 years earlier.

3. Results

The results showed that only four out of the 36 states of Nigeria, and the FCT (10.8%) were implementing a policy of free treatment for pregnant women and children at the time of the needs assessment (see Table 1). Eleven states offered partially free treatment for mothers and children, while the remaining 22 states did not offer any form of free treatment. The states that offered comprehensive free treatment were Nasarawa, Taraba, Osun and Balyesa States. Free treatment for mothers and children in these states included all components of care including prevention, treatment and surgery. Apart from implementing free treatment for pregnant women and children, Balyesa State also offered free treatment to all persons who tested positive for HIV, and gave a grant of N10,000.0 (US\$ 90) per month to each HIV patient for nutritional support.

As shown in Table 1 and Fig. 1, 11 (29.7%) states were offering partially free treatment for either mothers or children at the time of the needs assessment, while the remaining 22 (59.4%) States and the FCT did not have any policy on free treatment. The eleven States offering partially free treatment services were: Anambra, Rivers, Gombe, Kano, Jigawa, Ogun, Ondo, Lagos, Ebonyi, Kebbi and Zamfara States.

The analysis of the situation report from these states showed that Anambra provided only free antenatal care services, while Rivers provided free treatment for children less than 6 years, free health services for teenage mothers, and free caesarean section. Gombe and Kano States provided free treatment for all components of care for pregnant women, but not for children. Although Jigawa State provided free treatment for pregnant women, the women were required to pay "a token fee" for caesarean delivery.

By contrast, Ogun State provided free treatment for antenatal care and normal deliveries, but women had to pay the full cost of all operative deliveries. Kebbi provided free treatment for pregnant women and children less than 5 years of age. However, the cost of caesarean section was pegged at N8000 (USD\$ 67.0) for every woman undergoing

Table 2
Service utilization at Ebonyi Main Maternity Hospital before and after commencement of free maternity treatment.

	Before Program started (April 1, 2005–March 31, 2006)	After Program started (July 1, 2006–Jun 30, 2007)	% Increase
Antenatal attendance	600	3731	521
Delivery attendance	320	1480	362.5
Postnatal clinic attendance	310	1406	353.5

Table 3
Outcome of advocacy on free maternal and child health policy. Situation report of States practicing the policy 3 years after onset of advocacy.

States offering free MCH treatment in December 2009	States offering partial MCH treatment in December 2009	States not offering MCH treatment by December 2009
<i>n</i> = 9 (24.4%) Nasarawa, Bayelsa, Taraba, Osun, FCT, Kaduna, Ondo, Enugu, Adamawa	<i>n</i> = 14 (37.8%) Rivers, Gombe, Kano, Jigawa, Anambra, Ogun, Zamfara, Lagos, Ebonyi, Kebbi, Delta, Borno, Cross River, Akwa Ibom	<i>n</i> = 14 (37.8%) Plateau, Katsina, Bauchi, Niger, Edo, Ekiti, Sokoto, Oyo, Kwara, Imo, Kogi, Yobe, Abia, Benue
% Increase = 13.6%	% Increase = 8.1%	% Decrease = 21.7%

from the state on the effects of the program on quality of care and in reducing maternal mortality.

For States not practicing any form of free medical services for pregnant women and children, all accepted that the policy can improve access of women and children to evidence-based services and reduce maternal and child mortality. The only reason that many had not instituted the policy was because they had not thought of it, while some States (Kaduna, Kwara and Edo) promised to commence such policies as soon as practicable.

The results of the advocacy for free maternal and child health policy are presented in Table 3 and Fig. 2. Upon

presentation of the needs assessment report to the Federal Executive Council, the President immediately declared a policy of free treatment for pregnant women and children at all tertiary health institutions in Nigeria. However, the policy is yet to be implemented due to transition to a new administration at the Federal level in May 2007. Furthermore, the ruling Peoples Democratic Party included the policy in its 2007 electioneering campaign manifesto and directed its State Governors to implement the policy. Thus, since the advocacy began, more states began implementing free maternal and child health policies. These included Kaduna, Ondo, FCT, Enugu and Adamawa States. Delta State

Situation report of States practicing Free Maternal and Child Health (MCH) policy three years after onset of advocacy (Dec 2009)

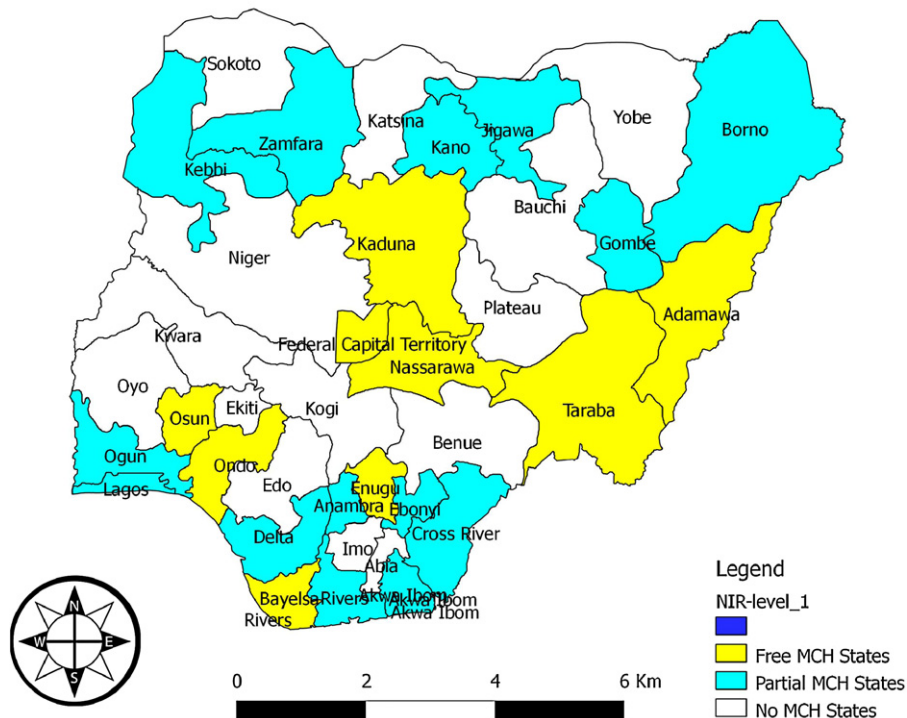


Fig. 2. Map showing distribution of states by availability of free maternal and child health care services in December 2009.

began a free maternal health policy in November 2007 which did not include the child health component.

The results of current practices of free maternal and child health policies by States in Nigeria show that by December 2009, nine States (and FCT) (24.4%) were practicing comprehensive free maternal and child health policy in Nigeria, while 14 states (37.8%) offered partially free services. Thus, the total number of states offering some aspects of free medical treatment for mothers and children is 23, representing 62.2% of States in Nigeria. This represents an increase of eight states (53.3%) over the 15 states that offered free services before the advocacy activities began.

Also, media reports indicate that there has been a broad support for the policy throughout Nigeria [20], with some Non-governmental organizations calling on the National and States Legislative Assemblies to promulgate a law to institutionalize the policy [21].

4. Discussion

The Millennium Development Goals 4 and 5 are designed to reduce the high rate of maternal and child mortality by the year 2015. If this global target is to be achieved, evidence-based interventions must be scaled up in countries with high rates of maternal and child mortality. Current estimates indicate that Nigeria is one country that is falling behind in achieving a significant reduction in maternal and child mortality [22,23,24]. Thus, concentrated short and long term measures are needed to aggressively push the issue in efforts to achieve these MDG health-related goals in Nigeria.

To date, efforts to reduce maternal and child mortality in Nigeria have been led by non-governmental organizations and donor agencies. However, in view of the multi-sectorial nature of the problem involving necessary developments in both health and non-health sectors, very little can be achieved unless governments take the lead in mobilizing resources to address the related problems. Available evidence suggests that many governments have shown inadequate commitment to address the issue largely because of lack of adequate information. Thus, advocacy directed at providing information to policymakers at the highest level of government on the extent and nature of the problem and on evidence-based interventions necessary to reverse the trend has been identified as critical to addressing the high maternal and child mortality in Nigeria [24]. The emergence of democratic governance in the country has also provided a great opportunity to target advocacy as an appropriate approach for advancing social change, such as a reduction in maternal and child mortality in the country.

Several reports indicate that the allocation of funds by various arms of government in Nigeria for specific programming in maternal and child health has been less than adequate [25,26]. Thus, providing free maternal and child health, apart from increasing access to evidence-based care for women and children, would also provide an avenue for governments to allocate substantial resources to this important sector. The results of the needs assessment showed that several States were already implementing various components of free maternal and child health services.

Most importantly, all States accepted during the needs assessment that a policy of eliminating user fees is desirable to increase access to services for pregnant women and children and to reduce maternal and child mortality in the country. However, we noted that many States faced several challenges in implementing their free maternal and child health policies. Not only were some of the policies not well grounded, but there were no data keeping and monitoring and evaluation procedures, and no quality assurance plans were put in place. Clearly, there is a need for the Ministry of Health to develop a blueprint and a set of criteria for states to use in implementing free maternal and child health policies.

For States that kept accurate records of their programs, the results of the needs assessment also showed that the cost of implementing free maternal and child health services need not be inordinately high. The cost of implementing free maternity care annually was estimated to be less than USD\$ 8.0 per woman in Nasarawa State, which if calculated for the expected number of pregnancies in the State would be less than 0.06% of the State budget, and less than 10% of the State budget for health. Since maternal and child health accounts for nearly 60% of the overall national health and mortality burden in any state, and to ensure program quality, it is possible for states with higher levels of commitment to pay more than these estimates in order to improve the quality of the services they provide.

Additionally, the costs should be calculated for the expected number of deliveries rather than the actual number of hospital visits. Experience in Ebonyi State showed that clinic attendance can increase by several percentage points after the commencement of a free maternal health program, and it is essential to make provisions for this expected increment. Calculations made on the basis of expected number of pregnancies will capture this progressive increase, and enable the allocation of appropriate level of funding to optimize care for all women and children in the state.

This preliminary report showed that advocacy has been successful in building the commitment of high-level government officials in addressing maternal and child health in Nigeria. Not only has the federal government declared a policy of free treatment for mothers and children, additional seven States started implementing comprehensive free maternal and child health program within 6 months of the advocacy activities. Several elements account for the high success of this advocacy process within the short period of its implementation. These include (1) the high commitment shown by the President of the country, who repeatedly spoke about the problem; (2) the presence of a champion (the Health Adviser) who provided evidence-based information on maternal and child mortality to policymakers; (3) the advent of democratic governance, with its culture of accountability; (4) the involvement of the media that gave wide publicity to the related activities; (5) the involvement of multiple high-level stakeholders in both health and non-health sectors; and (6) the specificity of the issue. We believe that further consolidation of these approaches will galvanize these achievements and result in substantial mobilization of resources for promoting maternal and child health in Nigeria.

Despite the high enthusiasm for the policy, its implementation will likely face several challenges and potential criticisms. The most important of these is the concern that the program might suffer inadequate funding and result in substantial decline in quality of maternal and child health services. Gilson and McIntyre in a classic paper [27] have cautioned as follows: “Though important, removing fees is not a simple exercise. Without supportive actions, fee removal can itself add to the performance problems of health systems.” Experiences in African countries like Ghana [28] and Burundi [29] have shown that a free treatment program can be associated with some decline in program quality. However, this decline was insignificant in Ghana, and only limited to the public sector. By contrast, service quality in the private sector in Ghana improved during the period, in a bid to retain clients that had moved over to the public sector because of a free health policy. For a country like Nigeria where up to 50% of maternity care is provided by the private sector, this potential increase in quality in private sector service delivery could be an indirect gain of the policy. Furthermore, South Africa introduced free maternity services without experiencing a significant decrease in service quality, probably because of the robust health system already in place in South Africa [30]. Decline in quality is not merely due to lack of funding, but more often due to poor organization of services and a weak health system. Thus, advocacy for free maternal and child health services must also include advocacy for improvement of the national health system in order to fully maximize the benefits of the program for poor women and children. Fortunately, the reform of the health system has been the major goal of the Nigerian Federal Ministry of Health over the past 5 years, but this needs to be expanded to involve the secondary and primary levels of care.

Inadequate funding could also pose a major challenge to the program. With high-level commitment, governments should be able to allocate adequate resources for the funding of the program. Indeed, one justification for free maternal and child health services in Nigeria is the current low level of allocation to health by sub-national levels of government in Nigeria. A policy of free maternal and child health services will ensure that governments prioritize the issue and allocate funds for the implementation of maternal and child health services in their areas of jurisdiction. If all governments buy into the policy, this will amount to a substantial level of increased funding for maternal and child health services in Nigeria.

Apart from direct government subventions, specific funding for the program can be leveraged by governments from several cost-recovery initiatives such as special taxes and levies to be paid by companies, increasing the costs of other “non-essential services” to release costs for maternal and child health care, and obtaining grants and donations for the program from within and outside the country. Although Nigeria has started a health insurance scheme, only women in formal employment are covered by the policy. Indeed, current reports [31] indicate that only 2.5 million persons out of the nation’s estimated 140 million persons (1.8%) are presently covered by the National Health Insurance Scheme. The large majority of poor unemployed women who are mainly affected by maternal and child ill-

nesses and death are presently not covered by the scheme. Therefore, free health care in Nigeria is an interim measure designed for poor women and their children until arrangements are made to cover all women and children with adequate health insurance policies.

In conclusion, we believe that free maternal and child health services can significantly increase access to evidence-based care and reduce maternal and child mortality in Nigeria on the short term. The results of our advocacy efforts have shown progressive acceptance of the policy by national and sub-national levels of government in Nigeria. There is a need to evolve a set of criteria and methods for implementing the policy throughout the country. Additional measures to improve the functioning of the health sector and to mobilize financial resources are needed to sustain the program over time.

References

- [1] Hogan MC, Foreman KJ, Naghavi MO, Ahn SY, Wang M, Makela SM, et al. Maternal mortality for 181 countries 1980–2008: a systematic analysis of progress made towards Millennium Development Goal 5. www.thelancet.com. Published online April 12, 2010; doi:10.1016/S0140-6736(10)60518-1.
- [2] National Population Commission (NPC) [Nigeria] and ICF Macro. Nigeria demographic and health survey 2008. Abuja, Nigeria: National Population Commission and ICF Macro; 2009.
- [3] Hill K, Thomas K, Abou Zahr C, Walker N, Say L, Inoue M, et al. Lancet 2007;370(October (9595)):1311–9.
- [4] Wall LL. Dead mothers and injured wives: the social context of maternal morbidity and mortality among the Hausa of northern Nigeria. *Studies in Family Planning* 1998;29(December (4)):341–59.
- [5] Okonofua FE, Abejide A, Makanjuola RA. Maternal mortality in Ile-Ife, Nigeria: a study of risk factors. *Studies in Family Planning* 1992;23(September–October (5)):319–24.
- [6] Adetunji JA. Infant mortality in Nigeria: effects of place of birth, mother’s education and region of residence. *Journal of Bioscience* 1994;26(October (4)):469–77.
- [7] World Bank. Nigeria report, 2003. Available on <http://ddp-ext.worldbank.org/ext/dd-pre-reports>. Accessed on January 7, 2008.
- [8] Olaogun AA, Brieger WR, Ayoola AB, Obianjuwa PO, Adebayo SO. Mother–father concordance in treatment choices in the care of sick children under five years of age in Osun State, Nigeria. *International Quarterly of Community Health Education* 2005–2006;25(3):283–93.
- [9] Federal Ministry of Health. Report of presidential task force on accelerated achievement of millennium development goals in Nigeria; 2005.
- [10] Orji EO, Dare FO, Makinde ON, Fasubaa OB. Determinants of mission house delivery among booked patients in a Nigerian hospital. *Journal of Obstetrics Gynaecology* 2001;21(September (5)):482–4.
- [11] Ezechi OC, Fasubaa OB, Dare FO. Socio-economic barriers to safe motherhood among booked patients in rural Nigerian communities. *Journal of Obstetrics Gynaecology* 2000;20(January (1)):32–4.
- [12] Kowalewski M, Mujinja P, Jahn A. Can mothers afford maternal health care costs? User costs of maternity services in rural Tanzania. *African Journal of Reproductive Health* 2002;6(April (1)):65–73.
- [13] James CD, Hanson K, McPake B, Balabanova D, Gwatkin D, et al. To retain or remove user fees? Reflections on the current debate in low- and middle income countries. *Applied Health Economics and Health Policy* 2006;5(3):137–53.
- [14] Diop F, Yazbeck A, Bitran R. The impact of alternative cost recovery schemes on access and equity in Niger. *Health Policy Planning* 1995;10(September (3)):223–40.
- [15] Sadauki S. Effect of elimination of user fees on maternal mortality in Kano State. Personal communication.
- [16] Yates R. Universal health care and the removal of user fees. *Lancet* 2009;373:2078–81.
- [17] Riddle V, Morestin F. A scoping review of the literature on the abolition of user fees in health care services in Africa. *Health Policy and Planning* 2010, doi:10.1093/heapol/czq021.
- [18] Storeng Tagmatarchi K, Baggaley RF, Ganaba R, Ouattara F, Akoum MS, Filippi V. Paying the price: the cost and consequences of emer-

- gency obstetrics care in Burkina Faso. *Social Science and Medicine* 2008;66(3):545–57.
- [19] Okonofua FE. Positioning maternal and child health for improving life expectancy in Nigeria. Paper presented at a presidential forum of health. Aso Rock Presidential Villa, Abuja; July 2006.
- [20] Nigeria: why we introduced free health services in Enugu State. *This Day Newspaper*; December 23, 2007.
- [21] Nigeria: NGO proposes law on free maternal health. *Daily Trust* (Abuja); December 16, 2007.
- [22] Okonofua FE. Achieving the millennium development goals in Africa. How realistic? *African Journal of Reproductive Health* 2005;9(December (3)):7–15.
- [23] Okonofua FE. Need to intensify safe motherhood interventions in Africa. *African Journal of Reproductive Health* 2003;7(December (3)):6–10.
- [24] Shiffman J, Okonofua FE. The state of political priority for safe motherhood in Nigeria. *British Journal of Obstetrics and Gynecology* 2007;114:127–33.
- [25] Soyibo A, Odumosu O, Ladejobi F, Lawanson A, Oladejo B, Alayande S. National Health Accounts of Nigeria, 1998–2002. Report submitted to the World Health Organization. Ibadan, Nigeria: University of Ibadan; 2005.
- [26] DUBY F. Resource materials for better health: round table report safe motherhood. Report on conference in Cross Rivers State. Abuja, Nigeria: PATHS and DFID; 2004.
- [27] Gilson L, McIntyre D. Removing user fees for primary health care in Africa: the need for careful action. *British Medical Journal* 2005;331(7519):762–5.
- [28] Witter S, Arhinful DK, Kusi A, Zakariah-Akoto S. The experience of Ghana in implementing a user fee exemption policy to provide free delivery care. *Reproductive Health Matters* 2007;15(November (30)):61–71.
- [29] Burundi: Side effects of free maternal, child health care. In <http://www.irinnews.org/report.aspxreportid=59267>. Accessed January 6, 2008.
- [30] Schneider H, Gilson L. The impact of free maternal health care in South Africa. In: Berer Marge, Sundari Ravindran TK, editors. *Safe motherhood initiatives; critical issues*. Oxford, England: Blackwell Science; 1999. p. 93–101.
- [31] Monye F. An appraisal of the National Health Insurance Scheme (NHIS) in Nigeria. *Commonwealth Law Bulletin* 2006;32(3):415–27.