Original Article

Impact of Free Maternal and Child Healthcare Programme on Maternal and Neonatal Healthcare Outcome in Enugu State of Nigeria

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ABSTRACT

BACKGROUND: Unaffordable medical bills is a major barrier to utilization of maternal and child healthcare services. This is associated with very high maternal and perinatal mortality and the inability to attain the MDG4 and MDG5 in many developing countries. This study examined the uptakes of obstetric services following introduction of Free Maternal and Child Health Care (FMCHC) in Enugu State University Teaching Hospital, Southeast Nigeria and its impact on the maternal and neonatal healthcare outcome.

METHODS: A retrospective comparative study of the utilizations of maternal and child healthcare services from June to August in 2008 with that of September to November in 2008 after commencement of the FMCHC. Information on all the pregnant women and neonates in their first week of Life that attended clinic within the period under review was collected from the Medical Records department of the hospital.

RESULTS: FMCHC caused tremendous increases in the uptakes of antenatal booking (202.2%), and hospital delivery (151.8%). It also resulted in decreased maternal and perinatal mortality by 16.4% and 34% respectively.

CONCLUSION: Implementation of FMCHC can make MDG4 and MDG5 attainable in sub-Saharan Africa.

KEY WORDS: Impact, FMCHC, maternal mortality, perinatal mortality, Enugu.

INTRODUCTION

Over 95% of the World's maternal deaths occur in sub-Saharan Africa and Asia; with Sub- Saharan Africa alone accounting for 50% of the world's maternal deaths in 2005.[1] Nigeria contributed 10% of the world's maternal deaths[2] and the lifetime risk of maternal death in sub-Saharan Africa is 1 in 22.[1]

In sub-Saharan Africa, there has been no evidence of reduction in maternal mortality since 1990;[3] instead there has been increases in several studies.[4,5,6] Thus the ability to achieve the Millennium Development Goal 4 (MDG4) and MDG5 appears a daunting task in this sub-region.[7]

The proportions of skilled health attendants at births in sub-Saharan Africa are still low at less than 50 percent in comparison to the global set targets of 85% by 2010.[1] Several factors have been identified to have contributed to these poor health indices in the developing countries.[2,4] Barriers to care and insufficient maternal and child care during pregnancy and delivery are largely responsible for the appalling annual toll of deaths in the sub-region.[7] These barriers include distance to health services, poor health infrastructures, rural dwelling, cost of Medicare, multiple demands on women's time, poverty, lack of decision-making power/socio-economic disempowerment of women, religious beliefs, illiteracy, ignorance, cultural issues, health providers unfriendly attitude to patients and clients, and the harmful traditional practices.[7,8,9,10]

In a bid to address some of these barriers to health services, the Enugu state government in southeast Nigeria, introduced FMCHC which commenced at the state Teaching Hospital Enugu on 1st September 2008. The objectives of this study are to compare the uptakes of obstetric services three months before and after the introduction of FMCHC in ESUT Teaching Hospital, Enugu and to determine the impact of FMCHC on MMR and PNMR.

MATERIALS AND METHODS

This is a retrospective review of ANC attendees together with women delivering over a 3 months period (June August, 2008) prior to the introduction of the FMCHC, compared to the 3 months period (September November, 2008) during the course of the FMCHC programme.

Information on all the pregnant women and neonates in their first week of life that attended clinic within the period under review was collected from the Medical Records department of the hospital. Information sort included: ANC bookings, ANC follow-up visits, obstetric blood usage, hospital delivery, maternal and perinatal mortality. The data were analyzed by simple percentages.

RESULTS

Seven hundred and fifty eight [758] pregnant women booked for antenatal care from June to August in 2008 while 2291 booked between September and November during the free maternal care giving a 202.2% increased uptake in ANC booking. ANC follow-up was 4520 from June to August as against 7691 from September to November, giving a 70.2% increased uptake in ANC follow-up. A total of 69 units (pints) of blood were received by the women from June to August while 105 units (pints) were received from September to

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November, giving a 52.2% increased uptake in obstetric blood usage. All these were illustrated in Table I.
Table II showed the degree of rise or fall in the various delivery/outcome variables compared during the study period. There was about 74.4% increase in unbooked delivery. The MMR decreased by 16.4% while the PNMR decreased by 34% during the FMCHC.
Table III showed the socioeconomic class of the patients seen during the study period. While patients in the upper class constituted two third of the hospital attendees prior to the introduction of FMCHC services, the same group constituted only a quarter of the attendees following introduction of FMCHC services.

Table 1: Comparison of various antenatal variables during the study period

INCREASE	JUN-AUG 20008	SEP-NOV 2008	INCREASE	%
ANC booking	758	2291	1533	200.2
ANC follow-up	4520	7691	3171	70.2
Obstetric blood usage(Pints)	69	105	36	52.2

Table II: Comparison of various delivery/outcome variables during the study period

INCREASE	JUN-AUG 2008	SEP-NOV 2008	INCREASE	%
Total Hosp delivery	443	791	348	151.8
Live births	443	795	352	79.5
Unbooked delivery	86	150	64	74.4
MMR/100,0000 Live births	451	377	↓by 74	↓by 16.4%
Perinatal death <7 days	30	23	↓ by 7	↓by 23.3%
PNMR/1000 Total births	131	87	↓ by 44	↓ by 34% by 44

Table III: Socio-economic Classification of the Hospital Antenatal Attendees

SOCIAL CLASS[12]	PERIOD OF ATTENDANCE			
	JUN AUG		SEPT- NOV	
	NO.	%	NO.	%
1	289	38.1	309	13.5
11	218	28.8	300	13.1
111	138	18.2	423	18.5
1V	67	8.8	591	25.8
V	46	6.8	668	29.2
TOTAL	758	100	2291	100

DISCUSSION

The FMCHC resulted in tremendous increases in service utilizations, and remarkable reductions in MMR and PNMR in this report. The availability of high quality obstetric services to a large population of pregnant mothers especially those in the lower social class who ordinarily could not have afforded such specialized services because of poverty, appears to explain these good results. The implication is that with provision of high quality FMCHC the MDG4 and MDG5 are attainable in sub-Saharan Africa.

It is thus clear that despite the enormous challenges to provision of quality care in our environment,[7] with political commitment and will on the part of the government, a lot is achievable in making adequate Medicare accessible to the populace.

Our major challenges during FMCHC are inadequate manpower and lack of accommodation for the teaming number of patients. This brings to fore the need for FMCHC in tertiary health institutions to be based strictly on only referrals from primary and secondary health facilities. This may likely reduce the overwhelming pressure on the hospital staff and facilities currently experienced in our hospital.

Decentralization of interventions to the communities and the provision of primary healthcare for mothers and newborn babies were known to be very cost effective.[11]

Skilled attendance at all births is considered to be the single most critical intervention for safe motherhood,[2] as it allows a timely diagnosis, management or referrals of these unpredictable and fatal emergencies to facilities offering emergency obstetric care. Problem then arises where even upon prompt referral of women with complicated pregnancies or fatal emergencies during antenatal or delivery, and there is yet not enough resources by the families to meet up with the demands of such emergency obstetric care in our tertiary hospitals. This no doubt has contributed to the persistently high maternal and perinatal mortality rates in our environment. Provision of FMCHC in our tertiary hospitals seems to be the antidote as seen in this report.

In conclusion, the impact of FMCHC programme in our hospital was highly favourable with resultant substantial increases in utilization of obstetric services, and remarkable reductions in maternal and perinatal mortality rates. Thus, if FMCHC is universally provided and sustained in our environment, it will help prevent avoidable deaths and make MDG4 and MDG5 attainable in our sub-region.

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