Level of male involvement in selected maternal health interventions involving nursing mothers in Benin City, Edo State, Nigeria

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Abstract

Nigeria contributes an estimated 19% of global pregnancy related mortalities. The involvement of men in maternal health interventions has immense implications for the uptake and thereby success of such interventions. This study assessed level of male involvement in selected maternal health interventions involving nursing mothers in Benin City, Edo State with a view to providing information to improve the implementation and success of these interventions. A descriptive facility based cross-sectional study design was carried out among two hundred and twenty nursing mothers attending selected immunization clinics in a health facility in Benin City, Edo State. Data were collected using pretested structured questionnaires and analyzed using IBM SPSS version 21.0 statistical software with statistical significance set at P<0.050. The mean (SD) age of male partners of nursing mothers studied was 38.1 (6.4) years. In relation to selected maternal interventions 205 (93.2%) registered for antenatal care (ANC), 159 (72.3%) attended postnatal care (PNC) while family planning uptake was 30 (13.6%). Furthermore, in relation to level of male involvement, 150 (68.2%) male partners paid for ANC registration, 143 (65.0%) accompanied spouse to delivery, 205 (93.2%) paid for delivery, 14 (8.8%) accompanied wife for PNC and 57 (34.5%) supported spouse uptake of family planning. The overall level of male involvement was good 113 (51.4%) among nursing mothers. This study identified that male involvement in selected maternal health interventions was good, in relation to male performance the highest being payment for delivery and least being postnatal care attendance. There is need to sustain and improve on the level of male involvement in relation to maternal health interventions to ensure better maternal and child health outcome in the study population.

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Introduction

Maternal mortality remains a major public health concern globally; especially in developing countries with over 300,000 pregnancy-related deaths reported annually.[1-3] Nigeria reports an estimated 58,000 maternal deaths annually, thus accounting for 19% of all annual global pregnancy-related deaths.[1,4-6] Men are major stakeholders in health, especially with regards to maternal health interventions and outcomes.[7-16] Nigeria is predominantly a patriarchal society with men as de-facto head of households and major gatekeepers in relation to decision making process especially relating to health among others.[17-19]

Over the years, evidence have shown the importance of gender roles on maternal and neonatal health outcomes, enhancing male support for health have been reported in literature to promote improved access to maternal health interventions such as antenatal care services; male involvement during pregnancy, improved postnatal services, improved maternal mental health, increased likelihood for contraceptive use with better adherence and decreased likelihood for risky behavior (smoking, substance abuse, risky sexual behaviors etc).[10-35] Conversely, reduced male involvement could negatively influence maternal health by reducing access and utilization of health services due to the socio-culturally dominant

and influential role men play in relation to decision making in most developing countries.[36-40]

Despite enormous evidence that male involvement increases uptake of maternal and child health services, studies show that few men are participating in Maternal Newborn and Child Health (MNCH) programs.[20-35,41-48] The level of male involvement in selected maternal health interventions remains a challenge in developing countries including Nigeria; several studies have buttressed this finding in Edo State,[51,52] Northern Nigeria,[53] El Salvador[54] Central America and Greece.[55] The Reasons for the low level of male involvement in MNCH Interventions have been attributed to socio-cultural and health system factors.[36-40,49-50]

This study was therefore conducted to help address this critical gap in the level of male involvement in selected maternal health interventions to help improve the MNCH indices in the study area and by extension in the Country. This study assessed level of male involvement in selected maternal health interventions involving nursing mothers in Benin City, Edo State with a view to providing data to guide the scale up of male involvement in maternal health interventions.

Materials and Methods

A facility based descriptive cross sectional study was carried out in the University of Benin Teaching Hospital (UBTH), Benin City, Edo State, Nigeria over a 12 month period from September 2015 to August 2016. The University of Benin Teaching Hospital (UBTH) is a tertiary health facility located in Egor Local Government Area of Edo State, established in 1973. Over the years' service delivery at UBTH has expanded tremendously with current in-patient capacity of over 800 beds. The UBTH has thirty-three departments and offers a wide range of services including preventive, curative and rehabilitative care. Immunization clinics are run daily both in the General Practice Clinic and Institute of Child health of the Hospital. An estimated sample size of 220 was calculated using Cochran's formula[56] for simple proportion based on a 13.9% prevalence of male attendance at ANC from a previous study.[52] Data was collected using pretested semi-structured interviewer administered questionnaires sub-divided into sections on socio-demographic characteristics of respondents and level of male involvement in selected maternal health interventions. Data collected was sorted for completeness and analyzed using IBM SPSS version 21.0 Statistical software. Level of male involvement in selected maternal health intervention was assessed using 6 questions, score of one (1) was given for every question affirming male support and point score of zero (0) for every response without male support giving a maximum score of 6 points, and this was converted into percentage. A percentage score of 50.0% and above was classified as good level of male involvement, while a percentage score of less than 50.0% was classified as poor level of male involvement. Results obtained were analyzed and presented as prose, frequency tables, charts and contingency tables. Level of significance was set at 95% confidence interval and $P<0.050$.

Ethical clearance was obtained from the Research and Ethics Committee (REC), College of Medical sciences, University of Benin, Edo State. Informed consent was obtained from individual respondents after full explanation of study objectives. The respondents were informed that participation in the study was voluntary and free of any penalties or loss of benefits for refusal to participate in the study or withdrawal from it.

Results

Two hundred and twenty nursing mothers participated in this study, the mean age of their male partners was 38.1 (6.4) years, 175 (79.5%) had tertiary level of education, 218 (99.1%) were Christians, 207 (94.1%) were married and 218 (99.1%) had some form of employment (Table 1).

A greater proportion of the respondents 150 (68.2%) said their male partners paid for their ANC registration, 143 (65.0%) accompanied them to delivery, 205 (93.2%) paid for their delivery. One hundred and fifty-nine (72.3%) of respondents attended postnatal care (PNC) clinic while 14 (8.8%) of respondents were accompanied by their male partners to PNC clinic. One hundred and sixty-five (75.0%) of the respondents had discussed intention to use family planning with their male partner, of which 57 (34.5%) were in support. Family planning uptake among respondents was 30 (13.6%) (Table 2).

In relation to level of male involvement in selected maternal health intervention; 131 (59.2%) and 89 (40.8%) of male partners were classified as good and poor respectively (Figure 1).

Discussion

The study revealed that the average age of male partners of respondents interviewed fell within the reproductive age (15-49 years) group; this is suggestive of the reproductive age group of the study population. In relation to selected maternal health interventions over 4/5th of respondents studied registered for ANC and admitted that 2/3rd of their male partners paid for their ANC. Furthermore, over 3/5th of male partners accompanied their partners with over 4/5th paying for delivery. An estimated 3/4th of respondents interviewed attended PNC with less than 1/10th of them being accompanied by their male partners. Interestingly, although 3/4th of respondents discussed family planning with their

Table 1. Socio-demographic characteristics of respondents' male partners.

Variables	Frequency (n=220)	Percent (%)
Age (years)*		
20-29	3	1.4
30-39	154	70.0
40-49	46	20.9
≥50	17	6.8
Level of education		
No formal education	1	0.5
Primary	3	1.4
Secondary	41	18.6
Tertiary	175	79.5
Religion		
Christianity	218	99.1
Islam	2	0.9
Marital Status		
Married	207	94.1
Cohabiting	13	5.9
Employment status		
Unemployed	2	0.9
Self-employed	72	32.7
Employed	146	66.4

*Mean Age: 38.1±6.4 years.

male partners only 1/3rd were in support of family planning with less than 1/5thof respondents studied taking up family planning. Men are major stakeholders in health, especially with regards to reproductive health and wellbeing; this is buttressed by the above findings. It has been reported in literature that successful outcome of any health intervention especially reproductive health will involve a high level of male engagement and support.[7-16] An interesting observation from this study is that male engagement and support was highest with regard to ANC and delivery, followed by family planning with the least being for PNC attendance. This could be due to the socio-cultural sentiments attached to pregnancy and childbirth, especially in relation to the high premium placed on childbearing in this part of the world to aid growing family size and name, compared to postnatal care, especially family planning which may be perceived to restrict family size and growth.

Male support for health has been reported in literature impact on the maternal health seeking behavior and by extension, to promote improved access to maternal health interventions such as antenatal care services; male involvement during pregnancy, improved postnatal services, increased likelihood for contraceptive use with better adherence.[10-35,43-48]

This study identified that the overall level of male involvement was good as reported in a similar study.[51] The level of male involvement identified in this study could have explained the high ANC uptake, PNC attendance and Family planning uptake among respondents studied. The family planning uptake by nursing mothers interviewed was similar to Nigeria national average.[57] The level of male involvement identified in this study although encouraging was in contrast to findings from other studies in Edo State,[51,52] Northern Nigeria,[53] El Salvador,[54] Central America and Greece.[55] Thus, highlighting the fact that level of male involvement in selected maternal health interventions remains a huge public health challenge in Nigeria, especially in developing countries. The reasons for the low level of male involvement in maternal, newborn and child health interventions have been attributed to socio-cultural and health system factors.[36-40,49-50,58] It is also very encouraging to note that over the years, there seems to be an increasing shift with regard to general improvement with male engagement and involvement towards health intervention, possibly following growing research evidence identifying the vital role men play in decision making especially in our environment which is predominantly, patriarchal in structure.[10-35,43-48] Nigeria is predominantly a patriarchal society with men identified as de-facto head of households and critical gatekeepers in relation to decision making process, health notwithstanding.[17-19]

Table 2. Level of male involvement in selected maternal health interventions.

Variables	Frequency (n=220)	Percent (%)
ANC Registration		
Yes	205	93.2
No	15	6.8
Payment for ANC registration		
Male partner	150	68.2
Respondent	70	32.8
Company to delivery		
Male partner	143	65.0
Mother	70	31.8
Friend	7	3.2
Payment for delivery		
Male partner	205	93.2
Respondent	15	6.8
PNC Attendance		
Yes	159	72.3
No	61	27.7
Company to PNC (n=159)		
Male partner	14	8.8
Mother/Sister	125	78.6
Respondent	20	12.6
Discussion of intention to use family planning with Partner		
Yes	165	75.0
No	55	25.0
Male partner support for family planning use (n=165)		
Yes	57	34.5
No	108	65.5
Family planning uptake by Respondents		
Yes	30	13.6
No	190	86.4

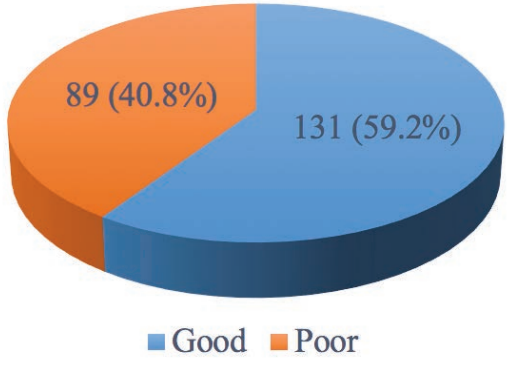

Figure 1. Level of male involvement in selected maternal health intervention.

Conclusions

This study identified that male involvement in selected maternal health interventions was good among male partners of nursing mothers in Benin City, Edo State. In relation to male performance in key maternal health interventions; payment for delivery was identified as the highest with the least being postnatal care attendance. There is need to sustain and improve on the level of male involvement to ensure better maternal, newborn and child health outcome in the study population.

Limitation of study

The findings of this study were based on self-report as some information given by respondents could not be verified as such could affect the validity of the study findings. Furthermore, the study was facility based and as such the selection process already excluded persons who don't utilize health facility care and thus findings from this study may be overestimated in relation to study objective.

References

1. WHO, UNICEF, UNFPA. Trends in maternal mortality: 1990 to 2015 estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations population division. Geneva;

2015. doi:10.
2. Bhutta ZA, Ali S, Cousens S, et al. Interventions to address maternal, newborn, and child survival: what difference can integrated primary health care strategies make? Lancet 2008;372:972-89.
3. Beard TC, Redmond S. Declaration of Alma-Ata. Lancet 1979;313:217-8.
4. Smith KB, van de Spuy ZM, Cheng L, et al. Is postpartum contraceptive advice given antenatally of value? Contraception 2002;65:237-43.
5. Chirowa F, Atwood S, Van der Putten M. Gender inequality, health expenditure and maternal mortality in sub-Saharan Africa: a secondary data analysis. African J Prim Heal Care Fam Med 2013;5:1-5.
6. Izugbara CO, Wekesah FM, Adedini SA. Maternal Health in Nigeria: Facts and Figures. Nairobi: Kenya; 2016.
7. Hounton S, Winfrey W, Barros JD, Askew I. Patterns and trends of postpartum family planning in Ethiopia, Malawi, and Nigeria: evidence of missed opportunities for integration. Glob Health Action 2015;8:29738.
8. Sileo KM. Determinants of Family Planning Service Uptake and Use of Contraceptives among Postpartum Women in Rural Uganda. Master's Theses. Paper 602. University of Connecticut Graduate School. 2014. Available from: http://digitalcommons.uconn.edu/gs_theses/602
9. Ezeh OK, Agho KE, Dibley MJ, et al. Determinants of neonatal mortality in Nigeria: evidence from the 2008 demographic and health survey. BMC Public Health 2014;14:521.
10. Ayanore MA, Pavlova M, Groot W. Unmet reproductive health needs among women in some West African countries: asystematic review of outcome measures and determinants. Reprod Health 2016;13:5.
11. Zapata LB, Murtaza S, Whiteman MK, et al. Contraceptive counselling and postpartum contraceptive use. Am J Obstet Gynecol 2015;212:e1-8.
12. Yunus A, Iqbal S, Munawar R, et al. Determinants of Postnatal Care Services Utilization in Pakistan- Insights from Pakistan Demographic and Health Survey (PDHS) 2006-07. Middle-East J Sci Res 2013;18:1440-7.
13. Khan, Shane, Vinod Mishra, Fred Arnold, and Noureddine Abderrahim. Contraceptive trends in developing countries. Calverton, MD: Macro International Inc. 2007. DHS Comparative Reports No. 16. http://www.measuredhs.com/pubs/pdf/CR16/CR16.pdf.
14. Cleland J, Harbison S, Shah IH. Unmet need for contraception: issues and challenges. Stud Fam Plann 2014;45:105-22.
15. Sedgh G, Hussain R, Bankole A, Singh S. Women with an unmet need for contraception in developing countries and their reasons for not using a method. New York: Guttmacher Intstitute. 2007. Occasional Report No. 37.
16. Singh S, Sedgh G, Hussain R. Unintended pregnancy: Worldwide levels, trends, and outcomes. Stud Fam Plann 2010;41:241-50.
17. Adongo PB, Tapsoba P, Phillips JF, et al. The role of community-based health planning and services strategy in involving males in the provision of family planning services: a qualitative study in southern Ghana. Reprod Health 2013;10:36.
18. Dworkin SL, Hatcher AM, Colvin C, Peacock D. Impact of a gender-transformative HIV and antiviolence program on gender ideologies and masculinities in two rural, south African communities. Men Masc 2013;16:181-202.
19. Mezieobi SA. Contemporary family choice: areas of Nigerian families change lag. Eur J Res Reflect Educ Sci 2017;5:66-70.
20. Redshaw M, Henderson J. Fathers' engagement in pregnancy and childbirth: evidence from a national survey. BMC Pregnancy Childbirth 2013;13:1-15.
21. Schaffer MA, Lia-Hoagberg B. Effects of social support on prenatal care and health behaviors of low-income women. J Obstet Gynecol Neonatal Nurs1997;26:433-40.
22. Martin LT, McNamara MJ, Milot AS, et al. The effects of father involvement during pregnancy on receipt of prenatal care and maternal smoking. Matern Child Health J 2007;11:595-602.
23. Kiernan K, Pickett KE. Marital status disparities in maternal smoking during pregnancy, breastfeeding and maternal depression. Soc Sci Med 2006;2:335-46.
24. Bielinski-Blattmann D, Lemola S, Jaussi C, et al. Postpartum depressive symptoms in the first 17 months after childbirth: the impact of an emotionally supportive partnership. Int J Public Health 2009;54:333-9.
25. O'Hara MW. Social support, life events, and depression during pregnancy and the puerperium. Arch Gen Psychiatry 1986;43:569-73.
26. Plantin L, Olukoya AA, Ny P. Positive health outcomes of fathers' involvement in pregnancy and childbirth paternal support: a scope study literature review. Fathering 2011;9:87-102.
27. Dennis CL, Ross L. Women's perceptions of partner support and conflict in the development of postpartum depressive symptoms. J Adv Nurs 2006;56:588-99.
28. Gremigni P, Mariani L, Marracino V, et al. Partner support and postpartum depressive symptoms. J Psychosom Obstet Gynaecol 2011;32:135-40.
29. Grube M. Inpatient treatment of women with postpartum psychiatric disorders—the role of the male partners. Arch Womens Ment Health 2005;8:163-70.
30. Al Dallal FH, Grant IN. Postnatal depression among Bahraini women: prevalence of symptoms and psychosocial risk factors. East Mediterr Health J 2012;18:432-8.
31. Lee D. Partner support reduced depressive symptoms in postpartum depression. Evid Based Ment Health 2001;4:51.
32. Reid H, Power M, Cheshire K. Factors influencing antenatal depression, anxiety and stress. Br J Midwifery 2009;17:501-8.
33. Stapleton LR, Schetter CD, Westling E, et al. Perceived partner support in pregnancy predicts lower maternal and infant distress. J Fam Psychol 2012;26:453-63.
34. Mekonnen W, Worku A. Determinants of low family planning use and high unmet need in Butajira District, South Central Ethiopia. Reprod Health 2011;8:1-8.
35. Yue K, O'Donnell C, Sparks PL. The effect of spousal communication on contraceptive use in Central Terai, Nepal. Patient Educ Couns 2010;81:402-8.
36. Dahl V, Mellhammar L, Bajunirwe F, Björkman P. Acceptance of HIV testing among women attending antenatal care in South-Western Uganda: risk factors and reasons for test refusal. AIDS Care 2008;20:746-52.
37. Mushi D, Mpenbeni R, Jahn A. Effectiveness of community-based safe motherhood promoters in improving utilization of obstetric care: the case of Mtwara rural district in Tanzania. BMC Pregnancy Childbirth 2010;10:14.
38. Adinma JI, Agbai AO, Nwosu BO. Contraceptive choices among Nigerian women attending an antenatal clinic. Adv Contracept 1998;14:131-45.
39. Bwazi C, Maluwa A, Chimwaza A, Pindani M. Utilization of Postpartum Family Planning Services between Six and Twelve Months of Delivery at Ntchisi District Hospital, Malawi. Health 2014;6:1724-37.

40. Allagoa DO, Nyengidiki TK. Knowledge, Attitude and Practice Of Contraception Amongst Antenatal Patients At The University Of Port Harcourt Teaching Hospital, Port Harcourt. Nigerian Health J 2011;11.
41. Aborigo RA, Reidpath DD, Oduro AR, Allotey P. Male involvement in maternal health: perspectives of opinion leaders. BMC Pregnancy Childbirth 2018;18:1-10.
42. Msuya SE, Mbizvo EM, Hussain A, et al. Stray-Pedersen B. low male partner participation in antenatal HIV counseling and testing in northern Tanzania: implications for preventive programs. AIDS Care 2008;20:700-9.
43. Redshaw M, Henderson J. Fathers' engagement in pregnancy and childbirth: evidence from a national survey. BMC Pregnancy Childbirth 2013;13:1.
44. Davis J, Vyankandondera J, Luchters S, et al. Male involvement in reproductive, maternal and child health: a qualitative study of policymaker and practitioner perspectives in the Pacific. Reprod Health 2016;13:1-11.
45. Stapleton LRT, Schetter CD, Westling E, et al. Perceived partner support in pregnancy predicts lower maternal and infant distress. J Fam Psychol 2012;26:453-63.
46. Martin LT, McNamara MJ, Milot AS, et al. The effects of father involvement during pregnancy on receipt of prenatal care and maternal smoking. Matern Child Health J 2007;11:595-602.
47. Mekonnen W, Worku A. Determinants of low family planning use and high unmet need in Butajira District. South Central Ethiopia Reprod Health BioMed Central 2011;8:37.
48. Yue K, O'Donnell C, Sparks PL. The effect of spousal communication on contraceptive use in central Terai, Nepal. Patient Educ Couns 2010;81:402-8.
49. Connell R. Gender, health and theory: conceptualizing the issue, in local and world perspective. Soc Sci Med Elsevier Ltd 2012;74:1675-83.
50. Kane S, Rial M, Matere A, et al. Gender relations and women's reproductive health in South Sudan. Glob Health Action 2016;9:1-11.
51. Adeleye OA, Chiwuzie J. He does his own and walks away. Perception about male attitudes and practices regarding safe motherhood in Ekiadolor, Southern Nigeria. Afr J Reprod Health 2007;11.
52. Obi AI, Abe E, Okojie OH. Male and Community Involvement in Birth Preparedness and Complication Readiness in Benin City, Southern Nigeria. IOSR J Dental Med Sci 2013;10:27-32.
53. Odimegwu C, Adewuyi A, Odebiyi T, et al. Men's Role in Emergency Obstetric Care in Osun State of Nigeria. Afr J Reprod Health 2005;9:59-71.
54. Iliyasu Z, Abubakar IS, Galadanci HS, Aliyu MH. Birth preparedness Complication Readiness and Fathers' participation in Maternity care in a Northern Nigerian Community. Afr J Reprod Health 2010;14:22-32.
55. Carter MW, Speizer I. Salvoran Fathers' attendance at prenatal care, delivery and post partum care. Rev Panam Salud Publica 2005;18:149-56.
56. Cochran WG. Sampling Techniques. Third Edition. New York: John Wiley & Sons, Inc.1977:149-156
57. National Population Commission (NPC) [Nigeria] and ICF International. 2014. Nigeria Demographic and Health Survey 2013. Abuja, Nigeria, and Rockville, Maryland, USA: NPC and ICF International.
58. Yargawa J, Leonardi-Bee J. Male involvement and maternal health outcomes: systematic review and meta-analysis. J Epidemiol Commun Health 2015;69:604:12.