AWARENESS AND PRACTICE OF POST ABORTION CARE SERVICES AMONG HEALTH CARE PROFESSIONALS IN SOUTHEASTERN NIGERIA

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Abstract. This study investigates knowledge and practices of post abortion care (PAC) services among health care professionals in the Anambra State of southeastern Nigeria. This was a prospective, cross-sectional, questionnaire based study conducted between 1 June and 30 September, 2006. The study involved a multistaged sampling of all registered health facilities in Anambra State, with the selection of 60 health facilities from which 450 participants were recruited. A pre-tested, structured questionnaire was employed to obtain information from the studied respondents. Obtained data were analyzed using Epi-Info version 2001. A total of 437 questionnaires out of 450 administered were accurately completed, giving a response rate of 97.1%. The respondents were comprised of general practitioners (214, 49.0%), nurses (161, 36.8%), specialist doctors (56, 12.8%), and resident doctors (5, 1.1%). The mean age of the respondents was 38.2±10.5 years. Most participants (203, 52.6%) were males; the majority (282, 64.5%) were working in the rural areas of the State, including mission hospitals (165, 37.8%) and general hospitals (145, 33.3%). Three hundred thirty respondents (75.5%) were aware of PAC services. Twenty-seven (6.2%) and 28 (6.4%) of respondents were aware of community partnership and family planning services, respectively, as elements of PAC. Although the majority of respondents (302, 69.1%) treated abortion complications, only 155 (35.5%) used a manual vacuum aspirator. Three hundred thirty-eight (88.8%) offered counseling services, and 248 (56.8%) provided referrals to other reproductive health services.

Key words: post abortion care services, awareness, practices, healthcare professionals, Nigeria

INTRODUCTION

Each year, more than 4.2 million African women undergo unsafe abortions, and an estimated 38,000 of them die from the experience. These women represent over 50% of all women globally who die from abortion-related causes (WHO, 1998). Amongst the women surviving the ordeal, several thousands experience various short- and long-term morbidities including uterine perforation, chronic pelvic pain, and secondary infertility. Unsafe

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abortion victims may also suffer stigma and isolation imposed on them by their families and communities.

In countries with restrictive abortion laws, women attempt to end unwanted pregnancies through clandestine means because of the absence of legal abortion services. They may carry out this by themselves or in collaboration with a pharmacist, herbalist, or unskilled practitioners, usually in unhygienic settings, using techniques likely to cause hemorrhage, infection or other types of morbidity (Rogo, 1993; Ahiadeke, 2001). In the vast majority of African countries, abortion remains both unauthorized and unsafe. Safe procedures are accessible only to wealthier and more educated women, leaving the poor, and often marginalized, women to suffer disproportionately. To compound the problem, when women in Africa suffer potentially life-threatening complications from unsafe abortion, they rarely have access to prompt treatment (Rogo, 1993). A woman's risk of dying from complications of pregnancy or childbirth in Europe is 1 in 600, it is appallingly high in Africa, with figures as high as 1 in 7 in Ethiopia, with more than half of those deaths attributable to unsafe abortion (WHO, 2001). The risk of death from unsafe abortion in Africa is the highest in the world with a case fatality rate of 0.7% (Ahiadeke, 2001).

In order to stem the maternal mortality and morbidity arising from unsafe abortions, especially in countries with restrictive abortion laws, post abortion care (PAC) was developed. It is defined as an approach for reducing mortality and morbidity from incomplete and unsafe abortions and resulting complications, and for improving women's sexual and reproductive health and lives (Postabortion Care Consortium Community Task Force, 2002). PAC consists of five elements *viz* community and service provider partnership for prevention of unwanted pregnancies and unsafe abortions, together with mobilization of resources and ensuring services reflect and meet community expectations and needs; counseling to identify and respond to women's emotional and physical health needs and other concerns; treatment of incomplete and unsafe abortions, including the use of manual vacuum aspirator (MVA); contraceptive and family planning services to help women prevent an unwanted pregnancy or practice birth spacing; and linkage to reproductive and other health services provided on-site or via referrals.

It has been observed in general that public health systems in Africa have neglected PAC and failed to ensure widespread availability or services of adequate quality. In Senegal, for an example, more than two-thirds of women interviewed had visited two or more hospitals before receiving treatment for abortion complications, causing a delay of up to five days after the onset of symptoms (The Population Council, 2000a). A Kenyan study also found that women with abortion complications may seek services in multiple locations before finally receiving care (Rogo *et al*, 1999). In Nigeria, abortion laws are restrictive, abortion being permissible only to save the life of the mother. The ensuing complications from unsafe abortion has contributed immensely to the overall high maternal mortality and morbidity in Nigeria. Available reports in Nigeria show a very poor knowledge and practice of PAC by the health care providers (Etuk *et al*, 2003; Okonofua *et al*, 2005).

Considering the large contribution of unsafe abortions to the high maternal

mortality rate in Nigeria, and in Africa in general, it is apparent efforts to reduce maternal mortality and improve maternal health without addressing the issue of unsafe abortion will not succeed. The role of safe abortion services in the improvement of women's health was recognized in the 1994 International Conference on Population and Development (ICPD), where participants at the conference agreed "in circumstances where abortion is not against the law, such abortions should be safe. In all cases, women should have access to quality services for the management of complications arising from abortion" (Anonymous, 1994). A comprehensive PAC service has been considered central in mitigating the adverse health impact of unsafe abortions in regions with restrictive abortion laws.

This study investigated the knowledge and practices of PAC services, taking into cosideration the elements of PAC, among health care professionals in Anambra State, southeastern Nigeria. The results are relevant to programs geared towards the improvement of the provision of PAC services in general, a prerequisite to the reduction of maternal mortality from abortion and its complications.

Study background

Anambra State is one of the 36 States of Nigeria, and belongs to the southeast geo-political zone comprised of five States. It has a population of approximately four million people, most of whom are of the Igbo speaking ethnic group of Nigeria, and are predominantly Christians. The Igbos of southeasthern Nigeria are one of the three major ethnic groups in Nigeria, the others being the Hausas in the North and the Yorubas in the southwest. The Igbos are relatively more literate and an economically bouyant group in Nigeria, and are therefore expected to embrace modern and orthodox medical practices, such as hospital consultations, delivery in orthodox health facilities, and modern family planning methods. Essentially, the health care delivery structure in Nigeria consists of primary health care which operates mainly in rural areas often manned by nurses or community health workers, and is controlled by the local government; secondary health care usually manned by medical doctors, often general practitioners, and controlled by the State government, and voluntary agencies (mission) hospitals; and tertiary health care controlled by the Federal Government, manned by specialist consultants, and usually resident doctors. Private specialist hospitals may belong to this category.

MATERIALS AND METHODS

This was a prospective, cross-sectional, questionnaire based study conducted amongst health care professionals in Anambra State, Nigeria between 1 June and 30 September, 2006. A list of registered health facilities in the State was obtained from the State Ministry of Health. Sample selection was carried out using the multistage sampling technique involving stratified random sampling to group health facilities into primary, secondary, and tertiary facilities from which a total of 60 health facilities were selected by simple random sampling, following proportionate allocation of sample size to the various categories of health care facilities. Simple random sampling was also employed to further select the subjects from the health facilities. A total of 450 health professionals were selected. Primary health centers and maternity homes constituted the primary facilities; general hospitals and mission hospitals were catego-

rized as secondary facilities and university teaching hospitals and private specialist hospitals were grouped as tertiary facilities. Health professionals in these health facilities were interviewed using a pre-tested, structured, self administered questionnaire to obtain information regarding their socio-demographic characteristics, along with their knowledge and practice of the five elements of PAC services. The data were analyzed using Epi-Info version 2001. Statistical relationships between variables were explored using the chi-square test and a *p*-value of < 0.05 at a 95% confidence interval was considered significant for all statistical comparisons.

RESULTS

Four hundred thirty-seven out of 450 questionnaires were accurately completed, giving a response rate of 97.1%. The distribution by biosocial characteristics of the respondents is shown in Table 1. The respondents were general practitioners (214, 49.0%), nurses (161, 36.8%), specialist doctors (56, 12.8%), resident doctors (5, 1.1%), and a community health worker (1, 0.02%). The mean age of the respondents was 38.2 ± 10.5 years. Two hundred thirty (52.6%) were males. The majority (282, 64.5%) were practicing in rural parts of the State.

Table 2 shows the distribution of the institutions of practice of the respondents. Most (165, 37.8%) practiced in mission hospitals and general hospitals (145, 33.3%). Only a few (14, 3.0%) worked in primary health centers.

Table 3 shows the awareness of and practices of the five components of the PAC among the respondents. Three hundred thirty respondents (75.5%) were aware of PAC services. Most (318, 72.8%) were aware of counseling, the use of MVA (259, 59.3%) and referrals linkages (278, 63.6%), only 27 (6.2%) and 28 (6.4%) respondents were aware community partnership and family planning are components of PAC services, respectively. With

Table 1
Biosocial characteristics of the respondents.

Characteristics	No. (*N*=437)	%
Health professionals		
General practitioners	214	(49.0)
Nurses	161	(36.8)
Specialist doctors	56	(12.8)
Resident doctors	5	(1.1)
Community health officers	1	(0.02)
Age (years)		
20-24	25	(5.7)
25-29	104	(23.8)
30-34	42	(9.6)
35-39	50	(11.4)
40-44	94	(21.5)
45-49	58	(13.3)
≥50	64	(14.7)
Sex		
Male	230	(52.6)
Female	207	(47.4)
Location of practice		
Rural	282	(64.5)
Urban	155	(35.5)

Table 2
Institution of practice of the respondents.

Institution of practice	No.	%
Mission hospitals	165	(37.8)
General hospitals	145	(33.3)
Private hospitals (GP)	33	(7.6)
Maternity homes	33	(7.6)
Private specialist hospitals	26	(6.0)
Teaching hospital	21	(4.8)
Health centers	14	(3.0)
Total	437	100

GP, general practitioner

Table 3
Awareness and practice of PAC services among respondents.

PAC services	Awareness No. (%)	Practice No. (%)	Statistical relationship		
			χ^2	*p*-value	
Counseling	318 (72.8)	302 (69.1)	1.25	0.26	NS
Use of MVA	259 (59.3)	155 (35.5)	48.69	<0.05	S
Linkages	278 (63.6)	248 (56.8)	4.02	0.05	NS
Community partnership	27 (6.2)	25 (5.7)	0.02	0.89	NS
Family planning	28 (6.4)	20 (4.6)	0.29	0.59	NS

NS, Not significant; S, Significant

Table 4
Distribution by comparisons of different characteristics of respondents, for use of MVA.

Characteristics	Use of MVA		*p*-value
	No. (%)	χ^2	
Cadre			
Nurse	25 (15.5)	40.68	0.001
Doctors	127 (46.2)		
Specialization			
General practitioners	74 (34.6)	50.17	0.001
Specialists/Specialist-in training	53 (86.9)		
Location of practice			
Urban	56 (36.1)	0.027	0.87
Rural	97 (34.4)		
Institution of practice			
Government hospitals	58 (32.4)	1.02	0.31
Mission hospitals	63 (38.2)		
Private hospitals	28 (47.5)		
Sex			
Male	105 (45.7)	21.6	0.87
Female	48 (23.2)		

respect to the actual practice of the individual components of PAC, the majority of the respondents (388, 88.8%) treated at least some of abortion complications or gave counseling (302, 69.1%); (248, 56.8%) provided a referral to another reproductive health service and 155 (35.5%) performed MVA. Twenty-five (5.7%) and 20 (4.6%) respondents practiced community partnership and family planning, respectively. There was a significant lag between the knowledge and practice of the use of MVA (χ^2=48.69; p<0.01).

Table 4 shows the distribution of the different characteristics (health professionals, specialties, location of practice, institution of practice, and sex) of respondents, who performed MVA. Significantly more

doctors perfomed MVA than nurses (χ^2=40.68; p<0.05). Specialists and specialists-in-training (residents) were significantly more likely to perform MVA than general practitioners (χ^2=50.17; p<0.05). There were no significant differences among the institutions of practice (χ^2=1.02; p=0.31), locations of practice (χ^2=4.02; p=0.87), or sex (χ^2=21.6; p=0.87) among respondents who performed MVA.

DISCUSSION

This study of PAC services was conducted amongst doctors and nurses in health facilities drawn from three segments of health care: primary, secondary and tertiary. Nurses and doctors have been designated as skilled birth attendants, the managers of pregnancies and deliveries (Giwa-Osagie, 2002). The overall awareness of PAC services of 75.5% is high and therefore commendible. However, awareness seems to be incomplete regarding the five elements of PAC; awareness was relatively high for counseling (72.8%), reproductive health referrals (63.6%), and the use of MVA (59.3%), but the awereness of community partnerships (6.2%) and family planning/contraception (6.4%) was low. Practice of the various elements of PAC services was high and there was no significant differences between awareness and practice with the exception of the use of MVA, which differed significantly between awareness (59.3%) and practice (35.5%) (χ^2 = 48.69; p<0.05), representing a possible unmet need for MVA practice.

Counseling awareness (72.8%) and practice (69.1%) ranked highest amongst the five elements of PAC services. Effective counseling is central to a successful implementation of PAC services in that it permeates every component of the services, from the first contact between the woman and the provider to the last contact, and aims at identifying and responding to the emotional and physical needs of the woman. Lack of empathy and judgemental attitudes of health care providers towards women seeking abortion services have been associated with deleterious consequencies, including long waiting times, abusive language, improper pain management, higher fees, and lack of privacy (Salter *et al*, 1997). A Kenyan study reported a long waiting time, up to several days, before women seeking post abortion care services received treatment, and the absence of pain medication for the women having the MVA procedures (Ominde *et al*, 1997). The counseling component of the PAC services provides the opportunity and the environment to explore other sexual and reproductive health concerns of the woman who may be making contact with such health services for the first time. Infertility, genital tract tumors, such as uterine fibroids, sexually transmitted infections, including HIV/AIDS, and other problem, such as domestic violence and sexual exploitation, may be evaluated, or screened for as part of a holistic approach to the management of the client. Screening for HIV/AIDS, for example, is important because women who have had an abortion have had unprotected sex and may unknowingly be HIV positive. In South Africa a study found that just over one-half of patients treated for post abortion complications were given information about HIV/AIDS (Dickson-Tetteh *et al*, 2000). This indicates a missed opportunity for counseling of a vulnerable segment of the society on this very important health issue. Counseling should be associated with referral to other reproductive health units, either in the index facility or other referral centers within the health care providers' network, to en-

sure proper and complete management of PAC client. In this study, referrals to other reproductive health facilities occured in 56.8% of respondents, while awareness of the need for such referrals as a component of PAC services was present in 63.6% of respondents. These figures need to be improved upon considering the importance of referrals as a component of PAC services.

The awareness and practice of community partnership as a component of PAC was very low. This is worrisome as keeping abortion issues "hidden" at the community level creates an additional barrier to care as women and their families often do not know where to seek care for abortion complications. Community partnerships as an essential element of PAC acknowledge the vital role community members play in reduction of maternal morbidity and mortality as well as improving women's sexual and reproductive health and lives. A community study in Zimbabwe showed how problems arising from unwanted pregnancy and unsafe abortion can be reduced significantly through effective community education and dialogue regarding such problems, and the need to seek prompt treatment in appropriate health facilities (Settergren *et al*, 1999). To achieve universal local access to sustainable PAC services, it is necessary that health care providers be adequately trained regarding community partnership skills.

This study also reveals a low knowledge and practice of contraceptive services within the context of PAC. Many studies conducted in Africa have demonstrated integrating contraceptive counseling and services with treatment of abortion complications is an effective approach, resulting in an increased use of contraceptive services and long term usage (Solo *et al*, 1998; The Population Council, 2000b; Johnson *et al*, 2002). It is of utmost importance to integrate training in family planning counseling into PAC seminars.

The use of MVA among the respondents was low despite a high level of awareness. This may be related to a lack of skill, unavailability of the instruments, or lack of motivation to perform MVA. Currently, MVA remains the instrument of choice for uterine evacuation worldwide. It is fairly easy to do and is associated with fewer maternal injuries than other methods. Therefore, there is the need not only to train more providers in the appropriate use of MVA but also to make the instruments available and affordable to them. When the use of MVA among the respondents was compared among health care providers, more doctors used MVA than nurses. Scaling up of provision of PAC services requires the training of mid level providers regarding the use of MVA. Evidence abounds regarding the effectiveness of this approach (Billings *et al*, 1999; Dickson-Tetteh and Billings, 2002). Decentralizing PAC by training and authorizing the midwives/nurses at both the secondary and primary health facilities will improve the proximity of services to clients and reduce the distance a woman with an abortion complication will have to travel before accessing care.

The role of PAC in the reduction of maternal mortality and morbidity in countries such as Nigeria where abortion laws are restrictive has been studied (Anonymous, 1994). Although there was a high overall level of knowledge and practice of the various elements of PAC in this study, the levels of family planning and community partnership were still relatively low.

The use of MVA was also relatively low when compared to its awareness. There is the need to strengthen the capacity of health care providers regarding a more effective community partnership and family planning skills, as well as scale up services by training more health care providers, doctors, nurses and midwives, regarding PAC services, including the use of MVA, while making it available in a sustained manner to all health service delivery points.

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