KNOWLEDGE, ATTITUDES AND PRACTICE OF EMERGENCY CONTRACEPTION AMONG MEDICAL DOCTORS ATTENDING A CONTINUING MEDICAL EDUCATION PROGRAMME IN OSOGBO, SOUTH-WESTERN NIGERIA.

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ABSTRACT

Background: Emergency contraceptives (EC) play a very important role in the prevention of unwanted pregnancies when there are user failures with the regular devices. It is an integral part of the treatment of cases of sexual assaults and other unprotected sexual intercourse in susceptible subjects.

Aims & Objectives: This paper reported the knowledge, attitude and practice of different cadres of Physicians attending a CME session at Osogbo on emergency contraceptives.

Method: A descriptive cross-sectional study among doctors attending a Continuing Medical Education (CME) Programme organised by the College of Health Sciences, Osun State University at Osogbo, South West Nigeria. Data were collected from Resident doctors, General practitioners and Specialists using a structured 20-itemed questionnaires and were analysed using WINPEPI

Results: A little more than half of respondents had good knowledge of emergency contraception. Both positive and negative attitudes were equally represented. However, only 1 in 5 doctors had good practice about Emergency Contraception.

Specialization in any area of medicine had positive impact while duration over 10 years of practice had negative effect on knowledge and both were statistically significant.

Conclusion: Many Medical doctors have poor Knowledge and attitude of emergency contraception especially the general practitioners and those who have worked for more than ten years. The practice of EC is generally poor among the respondents and this may add to unmet needs for contraception in this environment.

Keywords: Knowledge, Contraception, Unmet need, Medical Practitioner.

INTRODUCTION

Emergency contraception (EC) has been described as the use of drugs or devices to prevent unwanted pregnancies within a few days of unprotected sexual intercourse[1]. Unwanted pregnancy is common, worldwide approximately 50 million pregnancies are terminated each year[2]. In the developing countries over 122 million women have unmet needs for

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contraception[3] from which unplanned and unwanted pregnancies do develop. One third of Nigeria's total population are youths between the ages of 10 and 24 years[4] and by 2025 the proportion is expected to escalate further[5]. Contraceptive prevalence is generally low with its attendant increase in unwanted pregnancies and a rather high level of abortions[6]. Induced abortions contribute significantly to maternal mortality; many of these deaths occurring among teenagers[7-9] .Yearly, over 600,000 abortions are performed in Nigeria, the majority of which are done under unsafe conditions[10]. Cases of rape and other sexual assaults have been on the increase in recent times[11] and the prescription of emergency contraception is a component part of WHO management protocol.[12] Any woman in the reproductive age who has been exposed to unprotected sexual intercourse and wishing to prevent pregnancy can use an emergency contraception[13]. Emergency contraception may be indicated in a sexually exposed patient in whom pregnancy is medically contraindicated. It is also the rescue measure when there is condom breakage and when the regular pills are missed around the ovulation period. The recommended methods include combined oral contraceptives (Yuzpe regimen), progestogen-only pills (minipills), copper-T 380 intrauterine device (IUD) and antiprogestin mifepristone RU (486). Emergency contraceptive drugs and devices are safe and effective[14-15] Emergency contraceptives may have been around for many years, yet studies have shown that knowledge about them among care givers is inadequate, even Gynaecologists in some instances have been found wanting in this regar[16]. Some with appreciable knowledge lack the correct attitudes in managing patients that need these services. Many cultural and religious barriers are also responsible for the less than optimal care some patients receive. Against these multitudes of challenges confronting appropriate use of EC as at when indicated, this study sought the Knowledge, prescribing patterns and attitudes among different categories of Medical Practitioners to EC in this environment.

MATERIALS AND METHODS

Study Design and Subjects

This descriptive cross-sectional study was conducted at the Continuing Medical Education (CME) Programme organised by the College of Health Sciences, Osun State University at Osogbo, South West Nigeria in March 2014. Each of the one hundred and eighty four doctors including Specialists in different fields, residents and General Practitioners from across the state was given a self- administered questionnaire. One hundred and seventy questionnaires were retrieved but only One hundred and sixty one were completed and were analysed for this study. Nine questionnaires were not completed and were excluded.

Survey Instrument

The survey instrument consisted of a two-page self administered questionnaire developed for the study by the authors through an elaborate search in similar studies. The first part of the questionnaire was used to collect demographic information about participants. The second part consisted of questions about knowledge, attitudes and practices relating to emergency contraception.

DATA COLLECTION AND ANALYSIS

Data were collected on a structured 20-itemed questionnaire. Data were entered via Microsoft Excel XP software and analysed using WINPEPI (Abramson, J.H. WINPEPI (PEPI-for-Windows): computer programs for epidemiologists. Epidemiologic Perspectives & Innovations 2004, 1: 6) Results presented in frequency tables and chi square were used to test the degree of association.

Knowledge and Practice score. Each correct

answer and practice was allotted a score of 1point. Incorrect answer and practice was scored 0 point each.

Attitude score. A 3 items attitude scale was used, Agree, disagree and indifference. Agree scored 1point, while disagree and indifference (both not being positive) were scored 0 point.

Candidates who scored below average marks were regarded as having poor knowledge, attitude and practice respectively.

Procedure

After obtaining verbal consent, each participant was given a survey questionnaire with an option to opt out if so desired. Respondents were also assured of confidentiality.

Ethics: Ethical approval for the study was obtained from the College of Health Science Committee on research ethic.

RESULTS

One hundred and sixty one (161) questionnaires were analysed from 170 questionnaires retrieved from participants giving a response rate of approximately 95%. Nine were not validly filled and were discarded

Table I shows the demographic profiles of respondents. In all, seventy two percent of participants were male, 80.1 % of the respondents were married. About twenty two percent of the respondents were Specialists in different areas of medicine, 4.3% were Resident Doctors and 74.0% were General Practitioners. About thirty four percent had practised for a period ranging from 0-5 years, 16.1% of them had practised for a period between 6-10 years, 19.9% of respondents had practised between 11-15 years and the remaining 29.8% of the respondents had practised for over 15 years.

Knowledge, Practice, Attitudes.

As shown in Table II most of the respondents (88.2%) knew that emergency contraception is reversible. About 37% did not know when to start combined oral emergency contraceptive pills (COECPs). About forty eight percent did not know that IUCD could be effective for emergency contraception after fertilization. 36.0% of the Physicians present did not know that EC are not abortifacients.

50% of respondents had not prescribed EC in the 12 months preceding the study. Over sixty percent did not prescribe EC due to inexperience and 70% as a result of fear of congenital malformation in case it failed. About 88.2 % had not attended update workshop where EC was discussed in the 24 months preceding the study.

Concerning attitude, only 14% of respondents were satisfied with their current knowledge level and as many as 66% of the study population would not refer patients for further consultations. Thirty nine percent of them believed that emergency contraception would promote promiscuity and similar number felt EC would discourage regular contraceptive use.

Table III Showed the weighted scores of Knowledge, attitude and practice. 55.5% of respondents had good knowledge, 51.5% had poor attitude and 80.1% had poor practice.

In table IV, statistical analysis of some of the knowledge-based items as regards different cadres of the Physicians are shown. It showed statistically significant difference in favour of specialists doctors compared to GPs.

Table V: Duration of practice was related to the knowledge of EC. Doctors who had practised for ten years or less had better knowledge than those who had practice for longer period and this was statistically significant.

DISCUSSION

In this study, more than a third of the population would commence combined oral emergency

contraceptive pill as late as 7days following unprotected coitus. This is different from the 72 to 120 hours that is known for effectiveness since the chances of unwanted pregnancy occurring increases with time after coitus.[17] Similar finding was noted in other studies both local and international, including the one from Pakistan[18-24]. This probably showed that poor knowledge of EC is a global phenomenon. Equally, the conduct of a pregnancy test prior to the Yuzpe method is not required except in medico-legal cases, since contraceptives are not arbotifacients and would only delay the intervention time. However, it may be necessary to rule out pregnancy before prescribing the IUCD so as not to further heighten the background risk of ectopic pregnancy. This could be done by asserting that the Client was between day 1-7 of her menstrual cycle and that she was fully breastfeeding a baby, amenorrhoeic and within 6 months of delivery[25]. Deficiencies were also noted in some other responses. About 60% of the Physicians were of the opinion that it was not necessary to repeat the emergency contraceptive pills should vomiting occur within 2 hours of intake, whereas it is standard practice to do so[14]. This knowledge vacuum must have been enhanced by non-attendance of or lack of regular workshops on emergency contraceptives more so that only 10% of the respondents had attended any in the 36 months preceding this study. This may be responsible for the poor knowledge score in the study. Similar observations were reported from similar studies carried out in the USA, Hong Kong and India, even among Obstetricians and Gynaecologists[26-28].

Appropriate patient's referral is recognised worldwide. In this study, only 34% of the respondents would refer patients to the Gynaecologist (Specialist). Referral may be seen by some as an admittance of incompetence which may not necessarily be the case. Some of the identified barriers against the prescription of EC included lack of knowledge, fear of side effects and birth defects. The hormonal devices are safe in the dosages in which they are taken either for the conventional contraceptive purpose or for the emergency precaution [15,29]. Religious ground for which 14% of the doctors would withhold EC from their patients should never arise. A Physician that is restricted by his or her religious faith should refer such patients to other doctors who are ready to manage them. In attitudinal profile, 66 5% of respondents did not agree EC could be a reason for patient referral, 75.8% were dissatisfied with their own knowledge of EC and the belief by as many as a quarter of the respondents that use of EC would discourage regular contraceptive methods can only lead to poor practice as observed in this report. Specialists doctors demonstrated statistically better knowledge compared to the GPs, even though GPs are expected to see more of such cases than the different specialists Doctors with the exception of Obstetrician and Gynaecologist. This may be the effects of training and re-training of the specialists doctors most of who practise in the teaching hospitals. In the same vein, some of the doctors who had practised for more than ten years were less accurate in their knowledge-based responses possibly reflecting negative effect of non attendance of refresher courses or workshops thus further stressing the importance of periodic updates in medical practice as emphasised by Medical and Dental Council of Nigeria (MDCN) and in compliance with international best practices.[30]

CONCLUSION

This study showed poor Knowledge and practice as well as negative attitude of Emergency contraception by majority of Medical doctors in this study. Specialist medical practitioners had statistically better knowledge than general practitioners. Duration of practice more than ten years and non attendance of workshops in the three years preceding

the study were commoner in those with poor knowledge of emergency contraception.

Specialization in medical practice and attendance of regular refresher courses are recommended to update knowledge, practice and discard negative attitudes to emergency contraception, a veritable instrument of preventing unwanted pregnancy and induced abortion with its attendant morbidity and mortality.

LIMITATION

The sample size in this study was small and a larger sample size would have strengthened the validity of the report.

AUTHORS' CONTRIBUTIONS

Leading author initiated the design, all authors took part in the conduct and analysis of the study. All authors read and approved the final manuscript.

Table I Demographic Profile of Study Population (n =161)

Demographic Profile	Number (%)
Position	
Specialists	35 (21.7)
Residents	7 (4.3)
General Practitioners	119(74) (74.0)
Sex	
Male	116(72.0)
Female	45(28.0)
Marital Status	
Married	129(80.1)
Unmarried	32(19.9)
Duration of Practice (In Years)	
0-5	55(34.2)
6-10	26(16.1)
11-15	32(19.9)
>15	48(29.8)

Table II Knowledge, Attitude and Practice Responses

Variables.	Responses.	
Knowledge of E C (%)	**Correct(%)**	**Incorrect**
EC should be by reversible methods	142 (88.2)	19(11.8)
Time to commence combined oral ECPs (COECP) is up to 7days.	61(37.9)	100(62.1)
Pregnancy test is mandatory before EC	55(34.2)	106(65.8)
EC are abortifacients	103(64.0)	58(36.0)
After fertilisation IUD can be effective for EC	84(52.2)	77(47.8)
COECP is repeated if vomiting occurs within 2 hrs of intake	64(39.8)	97(60.2)
COECP's commonest side effect is menstrual irregularity	74(46.0)	87(54.0)
Some religion forbids EC	133(82.6)	28(17.4)
Practice of EC.		
Have you attended a semin ar on EC in the last 24 months?	19(11.8)	142(88.2)
Have you prescribed EC in the last 12 months?	80(49.7)	81(50.3)
Do you usually give EC Clients follow ups appointmen t	59(36.6)	102(63.4)
Am reluctant to prescribe EC due to inexperience	48(29.8)	113(70.2)
Fear of birth defect is one reason i don't prescribe EC	50(31.1)	111(68.9)

Attitudes to prescribe and use of EC.	**Agree**	**Disagree**	**Indifference**
Benefits of EC outweigh the risks	106	16	39
EC discourage regular contr aceptive use	39	77	45
Gynaecologists are most suitable to prescribe EC	55	87	19
Are you satisfied with your knowledge of EC	23	122	16
Are you interested in learning more about EC	142	13	6
Should EC be more widely advertised	100	45	16
Patients may be referred to specialists for EC	54	107	-
EC use promote promiscuity	64	61	36
Litigation is problem in prescribi ng EC	42	71	48

Table III. Knowledge, Attitude and Practice Scores

KNOWLEDGE.	FREQUENCY.	PERCENTAGE.
Good	90	55.6
Poor	71	44.4
ATTITUDE		
Positive.	69	48.5
Negative.	92	51.5
PRACTICE		
Good	51	19.9
Poor	110	80.1

Table IV Comparative analysis of Different Doctors Groups to key questions on EC.

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Variable	Answer	Specialists	Residents	Total	Statistics
POEC is commenced	Yes	5(62.5)	3(37.5)	8(100)	χ^2= 1.513
within 120 days	No	30(88.2)	4(11.8)	34(100)	P = 0.219
Mandatory PT	Yes	8(72.7)	3(26.3)	11(100)	χ^2= 0.394
	No	27(87.1)	4(12.9)	31(100)	P = 0.530
Repeat POEC if	Yes	32(88.9)	4(11.1)	36(100)	χ^2= 3.150
vomited within 2 hrs	No	3(50)	3(50)	6(100)	P = 0.076
EC is effective after	Yes	9(75)	3(25)	12(100)	χ^2= 0.210
fertilization	No	26(86.7)	4(13.3)	30(100)	P = 0.647

Variable	Answer	Specialists	GPs	Total	Statistics
POEC is commenced	Yes	5(8.6)	53(91.4)	58(100)	χ^2= 10.543
within 120 days	No	30(31.25)	66(68.75)	96(100)	P = 0.001*
Mandatory PT	Yes	8(15.4))	44(84.6)	52(100)	χ^2= 2.410
	No	27(26.5)	75(73.5)	102(100)	P = 0.121
Repeat POEC if	Yes	32(53.3)	28(46.7)	36(100)	χ^2= 49.614 **
vomited within 2 hrs	No	3(3.2)	91(96.8))	94(100)	P< 0.001*
EC is effective after	Yes	9(11.1)	72(88.9)	81(100)	χ^2= 13.129
fertilization	No	26(35.6)	47(64.4)	73(100)	P< 0.001*

Variable	Answer	GPs	Residents	Total	Statistics
POEC is commenced	Yes	53(94.6)	3(5.4)	56(100)	χ^2= 0.000**
within 120 days	No	66(94.3)	4(5.7)	70(100)	P = 1.000
Mandatory PT	Yes	44(93.6)	3(6.4)	47(100)	χ^2= 0.000**
	No	75(94.9)	4(5.1)	79(100)	P = 1.000
Repeat POEC if	Yes	28(87.5)	4(12.5)	32(100)	χ^2= 2.368**
vomited within 2 hrs	No	91(96.8)	3(3.2)	94(100)	P = 0.124
EC is effective after	Yes	72(96.0)	3(4.0)	75(100)	
fertilization	No	47(92.1)	4(7.9)	51(100)	

*Statistically significant difference ** Yates correction applied to Pearson Chi square value

Table V: Duration Of Practice And Response To Key Ec Questions

Variable	Answer	0-10 yrs	>10 yrs	Total	Statistics
POEC is commenced	Yes	29(47.5)	32(52.5)	61(100)	χ^2= 0.301
within 120 hrs of coitus	No	52(52)	48(48)	100(100)	P = 0.583
Mandatory PT	Yes	18(32.7)	37(67.3)	55(100)	χ^2= 0.331
	No	63(59.4)	43(40.6)	106(100)	P = 0.001*
Repeat POEC if vomited	Yes	33(51.6)	31(48.4)	64(100)	χ^2= 0.067
within 2 hrs	No	48(49.5)	49(50.5)	97(100)	P = 0.796
EC is effective afte r	Yes	32(43.2)	42(56.8)	74(100)	χ^2= 6.311
fertilization	No	49((63.6)	28(36.4)	77(100)	P = 0.012*

*Statistically significant difference ** Yates correction applied to Pearson Chi square valu

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