

Knowledge, Attitude and Practice of Contraception by Doctors and Women in Kota Kinabalu, Sabah

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ABSTRACT

Evidence-based data confirm the relationship between an increased availability of effective contraception and reduction in induced abortion rate. In Malaysia, the contraception prevalence rate in 1966 was 8.8 per cent to 52 per cent in 1984, but has levelled off since then. In recent years there has been increasing report of babies 'abandonment' in Malaysia. The aim of this study is to determine the knowledge, attitudes and practices related to contraception among women and doctors in Kota Kinabalu the capital of Sabah, Malaysia. Descriptive and analytical community-based cross-sectional study was used. A total of 240 women and 60 doctors were selected from either private or public clinics. The instrument used was face-to-face interview for the women and self-administered questionnaires for doctors. Analysis was done using SPSS version 21. The doctors (80%) felt that contraception is extremely important, and routinely discuss (63%) with their patients. Oral contraceptive pill (97%) is the most common type of contraceptive available in their clinics. About 68% of doctors surprisingly cited that abstinence plays a major part in their contraceptive advice. The average correct answer by doctors on knowledge is 62%. The women surveyed (98.8%) have heard of contraception. The main reason for using is for spacing of pregnancy and many stopped or did not use because of fear of side effects. Women attending the public clinic appear to know more about female and male sterilization and intrauterine contraceptive device compared to those attending private clinic. Further research is needed to reinforce this study.

Keywords: contraception, knowledge, women

INTRODUCTION

Worldwide, 41 per cent of pregnancies were unintended in 2008.¹ Unintended pregnancies impact adversely upon a woman's lives in many ways. There are social, economic, cultural and health consequences, and at times even maternal mortality. Among the common outcomes for a mother with unintended pregnancies are; lack or absence of antenatal care and its adverse sequelae as well as missed opportunities for higher educational achievements especially where it involves teenage mothers. Babies born to mothers with unintended pregnancies have been known to be associated with low birth weight and slow cognitive developments.² In developing regions, unsafe abortion is the cause of close to 13 per cent of maternal death compared to 4 per cent in developed regions.³ It accounts for the largest proportion of hospital admission for gynaecological services in developing countries. This will affect the resources in many hospitals. A study by UNFPA/Guttmacher Institute showed that each dollar spent on contraception would reduce total medical spending by \$1.40 by cutting down on sums spent on unplanned births and abortions. Availability and access to contraception services can avoid many of the abortion related morbidity and mortality.⁴ This fact has become even more important of recent years as many countries have curtailed funding for family planning. There are many studies that offer a strong data linking lower abortion rates or declines in induced abortion with better access to high-quality family planning services and greater contraceptive use.^{5, 6, 7} An analysis

by Gilda Sedgh and colleagues showed that abortion rates in the developing countries have remained at high from 39 abortions per 1000 women in in 1990 – 1994 to 37 in 2010 – 2014. The availability of contraception in developed countries shows a significant decline from 46 abortions per 1000 women to 27 during the same period of time.⁸

The World Health Organization fact sheet on contraception showed 225 million unmet needs for contraception in the developing world. The reasons for this include limited choice of method, access, fear of side effects, cultural or religious apposition, users and provider bias and poor quality of available services.⁹

Realizing the importance of this fact, in the 1990’s UNFDP organized a series of conferences that emphasizes on reproductive rights as cornerstone of development. The reproductive rights among others include the right to decide the number, timing and spacing of children, the right to voluntarily marry and establish a family and the right to the highest attainable standard of health. The reproductive rights were clarified and endorsed internationally in the Cairo Consensus that emerged from the 1994 International Conference on Population and Development (ICPD). To date, the ICPD has been validated by a series of review.¹⁰

In Malaysia, family planning services has been available even prior to 1966. There have been changes in the family planning policy in line with the government population policy in 1984 to achieve an ultimate population of 70 million by 2100. The change in policy indirectly affects the emphasis on provision of contraception. The contraception prevalence rate according to the Malaysian Population and Family Survey in 1966 was 8.8 per cent, increased substantially to 36 per cent in 1974 and to 52 per cent in 1984, but has levelled off since then. It was noted that unmet need for modern contraception among Malaysians had increased from 25 per cent in 1988 to 36 per cent in 2004.^{11, 12}

The Confidential Enquiries into Maternal Deaths in Malaysia reported that abortion accounts annually for one to nine maternal deaths from 1997 to 2005.¹³ There were also an increasing number of babies being abandoned. From 2001 to 2004, the Social Welfare Department recorded 315 cases of abandoned babies, while police statistics revealed about 100 cases a year.¹⁴ Table 1 shows the Royal Malaysian Police Statistic on the number of ‘baby dumping’ reported in each state from 2005 to 7 April 2010.

Table 1 The number of baby dumping reported in each state from 2005 to 7 April 2010 according to the Headquarters of Royal Malaysian Police (Polis DiRaja Malaysia – PDRM)

States	Number of cases
Selangor	105
Johor	83
Sabah (S, 2007)	65
Sarawak	34
Negeri Sembilan	24
Pulau Pinang	22
Perak	19
Pahang	17
Kedah	17
Kelantan	10
Terengganu	5
Melaka	3
Kuala Lumpur	2
Perlis	1
Total	407

This study was embarked with the following hypothesis:

1. Patients lack of knowledge lead to misconception towards contraception subsequently refusal the use of contraception.
2. Doctors lack of knowledge lead to non-provision of contraception, and wrong advice to patients which causes the increase unmet need for contraception.

The objectives were as follows:

1. To find out the prevalence of contraceptive use in women of reproductive age group in Kota Kinabalu, Sabah.
2. To look at the reasons behind the unmet contraceptive needs.
3. To look at doctors' possible contributions towards the unmet needs.
4. To recommend an integrated approach based on the study results to:
 - a. Increase contraceptive uptake and acceptance by women.
 - b. Increase doctor knowledge and strengthen contraceptive practice.
 - c. To contribute to national database regarding contraceptive practice so that government and non-governmental organizations can reliably use these data in shaping future national or locally-based policies.

METHODOLOGY

This study is a descriptive clinic-based cross-sectional study. The study populations selected were women attending the public maternal and child health clinics (Klinik Kesihatan Ibu dan Anak – KKIA) and private general practitioner clinics in Kota Kinabalu, Sabah. The inclusion criteria were all women age between 18 to 45 years old attending maternal and child clinics. Women who have had a hysterectomy are excluded from this study. The study period was for 6 months from November 2014 to April 2015. Systematic sampling method was used for selection of women and study clinics. To calculate the total number of sample, the total population of women age 15 to 49 and the contraception prevalence rate in Malaysia were taken into consideration which was 226,029 (Sabah Census 2010) and 54.5% (1994) respectively. The total sample size was 240. Subjects were equally from public and private clinics which is 120 from each sector. The total sample for doctors was calculated to be 65 based on the expected contraceptive practice of 60%

and prevalence rate of 80% with precision of 5%. Fifteen and 45 doctors were selected from public and private clinics respectively.

The questionnaires were designed according to KAP methodology using WHO guidelines to assess knowledge and validated in Malay and English language.^{15, 16} Face-to-face interviews were used for patients and self-administered questionnaires for doctors. A training course regarding data collection was conducted for nurses and interviewers. All participants were given subject information sheet regarding the study and signed consent forms. An ethical clearance from health authorities such as Ministry of Health, Sabah and ethical committee of Universiti Malaysia Sabah were obtained.

Statistical analysis used was SPSS version 21. The tests that used were descriptive analysis, frequency, relative frequency for prevalence, and Person Chi-square test for independent sample categorical data analysis, and hypothesis testing for the hypothesis of this study.

Data collected was entered into a Statistical Package for Social Sciences (SPSS) database using a double-punch method and later matched to eliminate possible data entry errors.

RESULTS

Women

A total of 184 women did the survey, 88 and 96 from the public and private sectors respectively. Thirty-seven per cent of the women were of Kadazandusun and Murut (indigenous people) ethnicity, 10% were Malays, and 9% Chinese and 49% stated others as their ethnicity but was not specified further. As for education level, 11% and 59% studied up to primary and secondary schools respectively. There were 19% with tertiary education and 4.5% postgraduate level. Five per cent had no formal education. Ninety-six per cent of the women who did the survey were married.

Almost all the women who did the survey have heard of contraception before (98.8%). They heard it from doctors (39.1%), other health professionals (27.2%), friends (22.8%), media, internet, radio or television (6.5%) and from family (4.35%). The respondents have heard of the contraceptive pills (90%), injectable contraception (87%), condom (81%), intrauterine device (70%) and implants (53%). Only 10% and 7.4% of respondents have heard of intrauterine system and patch respectively. Ninety-seven per cent of the respondents from the public sector and 66.7% from private sector acknowledged that contraception was discussed with them during their clinic visits.

Of all the women who participated in the survey, 87.5% have used contraception before. The most commonly used contraception was the pill (56%), followed by injectable (43.4%), condoms (17.9%), and IUDs (10.5%). Some used lactational amenorrhea method (9.1%), rhythm method (5.6%), implanon (5.1%), done the female sterilization (4.6%), rings (4.2%), male sterilization (2.8%), IUS (2.6%) and a small number (less than 2%) have used the female condom, diaphragm, and patch. They get their contraception mainly from either government or private clinics depending on where the survey was done. A small percentage (10.7) obtained their contraception medication from pharmacies. Of the women surveyed, 24.6% used contraception for less than 6 months, 33.3% used between 6 to 12 months, 27.5% used for two years, 1.4% used for 3 years and 13% used for more than 3 years. Planning for another child was the main reason for stopping the contraception (64.2%), other reasons stated was worried of side effects (20%), not able to tolerate side effects (7%), became pregnant while on contraception (4.5%) and asked to stop by husband (4%). Weight gain was the main concern when it comes to side effects of contraception (85%), other concerns were emotional effect (8.7%), subfertility (4.3%) and less than 1% stated concern over pigmentation and cancer. Of those who never used contraception: 57% stated side effects, 20.3% husband objection,

6.5% against their religion and less than 4% stated because they were advised by health professionals not to take. Almost all (97.5%) think that contraception is important.

There were no significance differences of answers provided by women attending the public and private clinics except on 2 questions. There was significance association between the clinic type and knowledge ($p < 0.001$) and usage ($p = 0.01$) of contraception. Only 0.59% of women attending public clinics have not heard of contraception in contrast to 5.88% from the private clinics. There were only 5.81% of women attending the public clinics who have not used contraception before compared to 17.44% from the private clinics.

Doctors

A total of 35 doctors participated in the survey. More than half; 63% of the doctors' surveyed routinely discussed contraception with their patients and 34% will only discuss upon request. Eighty per cent of the doctors felt that contraception is extremely important to the total well-being of the female patients in the reproductive age group. Almost all (92%) the doctors were comfortable discussing contraception with teenagers or single female patients. Abstinence was always a major part of contraceptive advice for 23% of doctors and 46% of doctors reported that abstinence plays a major part of their contraceptive advice most of the time. Ninety-four per cent of doctors felt that healthcare professionals should initiate contraceptive discussion rather than patient. Among all respondents, 66% of doctors felt contraceptive discussion should be done by doctors and 35% felt that it should be left to nurses. When it comes to barriers to contraception the doctors cited the causes were 36% due to fear of side effects, 27% false belief, 6% husband objections, 18% financial problems and other causes such as patients' attitude and religious reasons. The available type of contraceptive methods in the doctors' practices are IUCD 54%, IUS 3%, injectable 83%, implants 26%, pills 89%, condoms 34%,

patch 9%, ring 6%, lactational amenorrhea 37%, rhythm method 40%, and withdrawal method 20%. The types of contraceptives that doctors will discuss and offer patients were male sterilization 29%, female sterilization 40%, IUCD 69%, IUS 11%, injectable 91%, implants 66%, pills 97%, condoms 57%, patch and ring 6%, LAM 31%, rhythm 29%, and withdrawal method 18%. Sixty-six per cent of doctors routinely assess patient's need for contraception, 83% routinely discuss the Contraceptive and Non-contraceptive benefits of Contraception while 48% only discuss the side effects of contraceptives in their counselling. For complicated cases, 72% will refer to obstetrics and gynaecology (O&G) while 15% will refer to KKIA and only 3% will refer to government hospitals.

The World Health Organization eligibility criteria were used as a basis to assess the doctors' knowledge on contraception.^{15, 16} Slightly over half (51%) of the doctors said that the latest a woman can start contraception is within 5 days of LMP. Majority (77%) said that a woman can start oral contraceptive pill (OCP) immediately post abortion or miscarriage. Almost all answered that a woman can have an injectable contraception immediately after another hormonal contraception without waiting for the next menstruation. Only 33% answered that an IUCD cannot be inserted on an amenorrhea woman. In terms of whether antibiotics are needed during copper IUCD insertion, 76% answered yes, 7% no and 17% were unsure. On emergency contraception 46% get the right answer. Sixty per cent of the respondent answered that there is risk of pregnancy when the pill are missed. In terms of what should be done when a woman develops amenorrhea while on injectable, 94% of respondents think counselling is sufficient. When a woman develops heavy bleeding while on injectable, 30% of doctor respondents will treat with Norethisterone, 27% will treat with Ethinylestradiol, 21% with Provera and 21% did not response. When a woman gets pregnant while on IUCD, 42% of doctors will remove it after counselling, 39% will not remove, 18% was unsure what to do. Seventy-seven per

cent of doctors answered that breast and pelvic examination is essential and mandatory before prescribing any type of hormonal contraception. On average, 62% of primary healthcare advices and management of contraceptive cases were in compliance with WHO recommendations.

DISCUSSION

This study showed that women are aware of contraception and the main source of information is from health personnel. The contraceptive pill is the main method of contraception; this is in agreement with many published data. The other method that is commonly used is injectable, which is not reported in most published data.^{17, 18} Most data reported that the condom is usually the other contraceptive method that is more commonly used. However the findings in this study showed that most women have heard of the pills followed by injectable. The selected public clinics in this study were clinics for women and children (KKIA) whereby the private clinics are general clinics that serve all population, hence contraceptive were discussed more than those private clinics. This also explained the relatively low knowledge and usage of contraception among women attending the private clinics. One of the main reasons for stopping or not using contraceptive was concerned of its side effects. Studies have shown that all contraceptive methods do have some minor side effects but with proper selection will not cause any significance effect on a woman's life. In fact compared to the risk of unintended pregnancy, side effect of any contraceptive methods is minute.¹⁹ Recent data have shown that the most effective contraceptives are the long-acting reversible contraceptive (LARC).²⁰ However, it is not the most discussed or commonly used methods in this study.

The healthcare professionals have been shown to have a major influence on women's mode of delivery and choice of contraception.^{21, 22} This stresses the important role of healthcare professionals in unmet need for contraception. It is surprising that although 94% of doctors

surveyed answered that healthcare professionals should initiate contraceptive discussion, only 63% routinely discussed with patients. Another finding of this study is that 69% of doctors cited that abstinence always or most of the time plays a major part in their contraceptive advice. It was also interesting to note that of the surveyed group of doctors, their advices and management were in average 62% in compliance with WHO recommendations. The findings in this study appear to indicate that some doctors are giving inappropriate contraceptive advice and management. Health personnel play a big role in educating and influencing patients to use contraception. Their lack of knowledge can lead to non-provision of contraception, and wrong advice to patients which caused the increase unmet need for contraception. There is also a need to keep all health personnel involved in giving contraceptive advice to continuously update themselves on recent advances in contraception. This will ensure all women seeking advice receive similar standard information. The findings of this suggest the hypothesis to be correct and achieved partially the objectives due to the limitation of this study.

LIMITATION

The number of subjects who participated in this study was small. The reasons for lack of participation were not clear but it may be the way the subjects were approached by the investigator. Some doctors were not quite happy to be questioned about their knowledge. The lack of participation need to be addressed and further study need to be done to support the findings in this study.

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