

# A STUDY OF KNOWLEDGE AND ATTITUDES TOWARDS CONTRACEPTION AMONG HEALTH CARE STAFF IN KELANTAN (MALAYSIA)

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## ABSTRACT

**Objective:** To study the knowledge, attitudes and practices on various contraceptive methods among all government health clinic staff in the state of Kelantan.

**Design:** Questionnaire-based study

**Setting:** All government health clinics in the state of Kelantan which are health facilities located outside the general hospital and seven district hospitals

**Subjects:** All 711 nursing staff employed in government health clinics in Kelantan state (sisters, staff nurses, assistant nurses and midwives)

**Method:** Pretested, prestructured proforma was sent out to all the nursing staff employed in all peripheral health centres to be completed by them and returned the same day via the medical officer in charge of that district.

**Results:** Most of the respondents were more than 30 years of age, married, multiparous and working for more than 5 years. Eighty to ninety percent practised contraception, with the majority of midwives preferring pills and the majority of staff nurses preferring condoms. Thirty to forty percent from all groups felt that folk methods are effective, and should be encouraged. Only about 50% of staff nurses are well informed on all contraceptive methods, but among assistant nurses and midwives, this figure is only 33%. A high proportion felt that the nursing curriculum deals inadequately with this subject.

**Conclusion:** The first step towards achieving success in our family planning programme lies in imparting more information to this target group of health workers, by incorporating more lectures during training and sending them for courses.

**Keywords:** health clinic staff, knowledge, attitudes, contraceptives

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## INTRODUCTION

Malaysia, with a population of 17.38 million, has a fairly high crude birth rate of 28.7 and infant mortality of 13.2. In the north-eastern state of Kelantan, these indices are much higher than the national average: a population of 1.19 million, crude birth rate of 35.2 and infant mortality rate of 16.7<sup>(1-3)</sup>. It has been reported that between 1955 and 1975, the total fertility rate in Peninsular Malaysia dropped from 6.2 to 4.1<sup>(4)</sup>. At present, modern contraceptive usage in this country is 31.3% among married couples, while in Kelantan, only 10% of married couples practise modern methods of contraception<sup>(5)</sup>. Factors contributing to this may be cultural taboos, religious beliefs and use of unreliable folk methods of contraception such as herbs and exercises.

In order to achieve Health For All by 2000 AD, it is important for the health workers and paramedical staff to contribute effectively in all spheres of health, including contraception. This study has been carried out with the purpose of finding out the level of knowledge and the attitude towards modern methods of contraception among those employed in government health clinics, who are thus directly responsible for health education.

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The study also seeks to determine the adequacy of the nursing syllabus on this topic.

## MATERIAL AND METHODS

A cross sectional survey was carried out on all the nursing staff employed in government health clinics (who are thus directly responsible for primary level of health care including family planning) in Kelantan state. At present there are a total of 711 staff, of which 13 are sisters, 141 staff nurses, 187 assistant nurses and the remaining are trained midwives.

The health clinics involved in the study include large health clinics which are manned by doctors and nurses, and small clinics which are manned by nurses alone.

The common contraceptive methods studied include the oral contraceptive pill (OCP), intra-uterine contraceptive device (IUCD), injectibles and condoms.

A pretested prestructured proforma was sent out to each one of the health staff in the peripheral centres to be completed by them and returned on the same day via the medical officer in charge of that district.

The proforma consisted of background data such as age, socioeconomic status (considered high income group when total family income exceed RM 1000 per month), years in service and preference of service. To assess their attitude regarding contraceptive practices, they were asked about duration of marriage, spacing between children, usage and effectiveness of contraceptives, and their impression about traditional (folk) methods of contraception.

In order to assess their knowledge, three basic questions on each method were asked, and the level of knowledge graded according to the number of correct answers.

All three answers correct : well informed  
One or two correct : partially informed  
All wrong : poorly informed

The proforma ended with questions on the number of family

planning courses attended, and whether the training imparted at nursing school was adequate to meet the demands of the family planning programme.

For purposes of analysis, the four categories were classified into Groups I, II, III and IV (for Sisters, staff nurses, assistant nurses and trained midwives respectively). A comparison was made between the four groups, and the results were analysed using the chi squared test. A p-value less than 0.05 was taken as significant<sup>(6)</sup>.

## RESULTS

Six hundred and forty (90%) of all nursing staff who received the questionnaire returned it the same day. The remainder were either on leave or attending training courses.

More than 90% of all respondents were over thirty years of age, Malay and in this job for more than two years. However the income level varied significantly between these groups, with 49.4% and 30% in Groups III and IV, and 90.9% and 85.5% of Groups I and II respectively falling into the higher income group ( $p < .001$ ) (Table I).

89.2% to 100% in all groups were in the job of their choice, and were happy working in peripheral health clinics. The reasons for working in this job despite a preference for hospital-based job were similar in all groups. The commonest was stated as administrative decision of posting and the other major reason was request for job near husband's place of work, regardless of the nature of job (Table II).

The majority of women in all four groups were married, and had between 1 to 5 children ( $p > 0.05$ ) (Table III). While less than 2% had no children, between 3.5 to 12% had more than 5. Over 57.8% in all groups voluntarily practised spacing more than two years in at least one instance.

81.8%, 86.9%, 89.2% and 87.7% respectively from the four groups used some form of contraception. The most popular method among sisters and midwives was oral pills (57.7% and 66.6% respectively) ( $p < 0.01$ , comparing Group IV vs Group II), while condoms were used more frequently by staff nurses and assistant nurses. An equal proportion in all groups preferred traditional methods of contraception such as herbs and exercises (Table IV).

Table V shows that 92.5% to 100% from all groups were agreeable to the idea of using contraceptive methods for spacing of families. Of those who disapproved, the majority cited religious beliefs as the reason, while the remainder felt that their husbands would object to the idea. 18.2%, 43.6%, 37.5% and 33.8% respectively from Groups I, II, III and IV felt that traditional methods of contraception are effective and should be encouraged as the sole method of family planning.

An assessment of their knowledge about various methods of contraception showed that 54.5% and 50.0% respectively from Groups I and II were well informed about all methods while the corresponding figure from Groups III and IV was 36.4% and 38.9% respectively ( $p = 0.019$ , comparing Groups II and IV) (Table VI). When analysed method-wise, best level of knowledge among the various groups was on OCP, with 43.7%-81.8% being well-informed and 18.2%-47.6% being partially informed. Knowledge on condoms was also fairly uniform among the various groups with 52.6%-64.8% being well-informed and hardly any being poorly informed. A little over a third from all the groups were well informed about injectibles and 51.6%-54.9% were partially informed with regard to the efficacy and method of usage of these agents. Less than a fourth of all the groups (and none among the sisters) were able to answer all three questions on IUCD correctly. Between 6.5%-15.6% of the various

**Table I - Background information**

Variable	Group I (n=11) (%)	II (n=122) (%)	III (n=173) (%)	IV (n=334) (%)
Age (years)				
21 - 30	nil	8.2	8.7	8.4
> 30	100	91.8	91.3	91.6
Race				
Malay	81.8	91.8	97.6	97.3
Chinese	18.2	8.2	2.4	2.7
Duration of job				
< 2 years	nil	12.3	8.7	5.7
2-5 years	nil	23.8	23.7	12.8
>5 years	100	63.9	67.6	81.5
Income level				
High	90.9	85.5	49.4	30*
Low	9.1	14.5	50.6	70

Group I : Sisters II : Staff Nurses  
III : Assistant Nurses IV : Midwives

\* $p < 0.001$ , comparing Groups II & IV.

**Table II - Preference of service**

Variable	Group I (n=11) (%)	II (n=122) (%)	III (n=173) (%)	IV (n=334) (%)
Hospital	nil	9.2	9.9	10.8
Health clinic	100	90.8	90.1	89.2
Reason for this job				
Administrative		54.9	47.0	61.1
Husband's job		27.1	35.3	30.5
Experience		9.0	11.7	5.5
Don't mind either job		9.0	6.0	2.9

**Table III - Obstetric history**

Variable	Group I (n=11) (%)	II (n=122) (%)	III (n=173) (%)	IV (n=334) (%)
Married	100	98.3	94.0	95.8
No. of children				
None	nil	0.8	0.6	2.1
1-5	90.9	95.9	87.3	89.0
>5	9.1	3.3	12.1	8.9
Spacing > 2 yrs	72.7	59.8	57.8	65.0

**Table IV - Contraceptive practices**

Variable	Group I (n=11) (%)	II (n=122) (%)	III (n=173) (%)	IV (n=334) (%)
Practise any method	81.8	98.3	94.0	95.8
Method used				
OCP	66.7	28.3	32.5	57.7*
Injectible	-	3.8	3.9	0.7
IUCD	-	11.3	9.0	9.6
Condom	11.1	34.9	35.1	11.2*
Traditional	22.2	21.7	19.5	20.8

\* $p < 0.01$ , comparing Groups II & IV

Table V - Attitudes towards contraception

Variable	Group I (n=11) (%)	II (n=122) (%)	III (n=173) (%)	IV (n=334) (%)
Agree to contraception	100	95.9	92.5	96.2
Reason for disagreeing				
Religious	–	80.0	92.3	76.9
Objection from husband	–	20.0	7.7	23.1
Encourage folk methods	18.2	43.6	37.5	33.8

Table VI - Knowledge of contraceptives

Variable	Group I (n=11) (%)	II (n=122) (%)	III (n=173) (%)	IV (n=334) (%)
OCP				
Good	81.8	57.4	46.3	43.7
Poor	–	4.1	3.5	6.6 <sup>#</sup>
Injectibles				
Good	45.5	44.3	31.8	33.2
Poor	–	4.1	13.3	13.8
IUCD				
Good	–	32	16.2	18.0
Poor	–	6.5	15.6	14.9
Condom				
Good	54.5	64.8	52.6	61.1
Poor	–	4.1	3.5	5.4
Overall				
Good	54.5	50.0*	36.4*	38.9
Poor	–	4.1	9.3	10.2

<sup>#</sup>Remainder had partial knowledge.

\* p=0.019, comparing Groups II & IV

Good: all three answers correct; Poor: all three wrong.

OCP: oral contraceptive pill; IUCD: intrauterine contraceptive device.

Table VII - Training in contraceptives

Variable	Group I (n=11) (%)	II (n=122) (%)	III (n=173) (%)	IV (n=334) (%)
Not informed before nursing school	45.5	55.7	56.6	57.9
Not informed after nursing school	27.2	13.1	20.2	7.0
Nursing syllabus inadequate on this topic	90.9	82.9	81.5	78.7
Attended course	100	79.5	79.7	71.3

groups did not have any significant knowledge on IUCD.

Table VII deals with the adequacy of the nursing curriculum and further training in family planning. 45.5%-57.9% said they had no knowledge of any contraceptive methods before joining nursing school, and 7%-27.2% said they did not become wiser on the subject even after completing the nursing course. 90.9%, 82.9%, 81.5% and 78.7% from Groups I, II, III and IV respectively felt that knowledge imparted in nursing school was inadequate for working purposes. 71.3% to 100% had attended at least one refresher course on family planning while working in this job.

## DISCUSSION

Of the 711 questionnaires sent out, 640 (90%) were returned the same day. We insisted on return the same day in order to eliminate any possibility of copying. The 10% who did not respond were either on leave or had gone to attend courses, so 100% of those present on the day of interview responded.

Although Malaysia is a multiracial society, the predominant ethnic group, especially in Kelantan, is Malay. Previous studies<sup>(7-10)</sup> have shown that the Malays, Chinese and Indians have different rates of contraception but this could not be highlighted in this study as the majority of the respondents were Malay (Table I).

It was unfortunate that about 10% of the respondents were not happy with the work they were doing (Table II). An area like family planning requires a certain amount of motivation from the workers, and if this is lacking, the programme cannot be successful. Many women gave administrative decision of posting as their reason for being in this job; it would be useful for the administrators to look into this. The other major reason was in order to be with their husbands, and this is quite understandable. With up to four marriages being permissible by Muslim law, women are worried about their husbands taking another wife, and so prefer not to be separated for any length of time.

Among the respondents, between 80% to 90% are practising some form of contraception for spacing purposes, and this is encouraging. With their personal experience, they are in a better position to discuss the various methods, their problems and efficacy. Nearly 25%, however, take recourse to traditional methods, such as herbs, exercises, abdominal heating and incantations. Since the efficacy of these methods<sup>(10)</sup> is not established, the fact that these workers may be promoting traditional methods instead of modern methods must be viewed with some concern (Table IV).

With more than 92.5% of the respondents being agreeable to usage of contraceptive methods for spacing purposes, the chances of a successful family planning programme with consequent drop in maternal and perinatal mortality should be fairly good. What is worrying is the proportion of these workers who feel that traditional methods are effective and must be encouraged (Table V). While it may not be fair to discard the traditional methods as entirely useless, too much reliance cannot be placed on these practices until their efficacy is actually established.

The nursing schools as well as administrators have to take a serious view of the limited knowledge that these workers have on modern methods of contraception. Of the three fairly basic questions asked regarding safety, efficacy and action of the various methods, all were answered correctly only by half the sisters and staff nurses, and one-third of the assistant nurses and midwives (Table VI). This is despite the fact that over 75% have attended at least one course on family planning! (Table VII). Also of serious note is that between 7%-27% felt they did not have any exposure to this topic during their training, and as many as 90% of the respondents felt that the knowledge imparted on contraceptive methods in nursing school was definitely inadequate for working purposes.

While it is heartening to note that a high proportion of nursing staff practise contraception for spacing their families, it is unacceptable that such a high number should be encouraging traditional methods like herbs and incantations, since their efficacy has not been proven. Since the entire family planning programme actually hinges on these workers, they have to be educated and guided in the right direction if any measure of success is to be achieved. Inclusion of more lectures in the nursing syllabus, more frequent and thorough refresher courses for all

these nursing staff and posting those who are interested in this job as far as possible are some of the ways in which the existing situation can be improved.

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