

Characteristics of Injectable Contraceptive Users among Rural Women of a Selected Area in Bangladesh

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Abstract

Background : Injectable contraceptive, Depot Medroxy Progesteron Acetate (DMPA) is safe, effective, convenient and long acting hormonal contraceptive. It is estimated that about 30 million women in more than 90 countries are using this method. It is the third most popular contraceptive method.

Objective : To find out the characteristics of injectable contraceptive users in a rural area of Bangladesh

Methodology : This descriptive cross-sectional study was carried out between December 2011 to May 2012. A total 93 clients were selected purposely from village Islampur in Dhamrai upazila. Data were collected by face to face interview, using a pre-tested questionnaire.

Result : The study revealed that most (50.54%) of the respondents were young aged women (25-34yrs), Muslim respondents were (98.92%) and educated (27.96%) up to secondary level. About 88.17% of the participants were house wives and 60.22% had family members < 4. The socio-economic status revealed that 50.53% of the women had family income between 5,000-10,000 taka. The participants (97.85%) enjoyed good health. Reproductive health status showed that 62.37% of women's age of menarche started within 11-13yr and 65.59% had regular menstrual cycle. Most of the women (58.06%) got married between 17-21yrs and 50.54% women conceived 1-2 times. Age of youngest child was below 5 years about 58.06%. Only 36.56% respondents took injection DMPA after birth of first child. 46.24% of the participants got information from primary level health worker (FWV/HA). Nearly half of the women (48.39%) took injection 1-5 times. Post injection health problem within 6 months revealed that 73.12% had health problems. Among them 75% women had Amenorrhea.

Conclusion : Proper counseling before initiation of injection, immediate and adequate management of side effects should be taken into consideration.

Introduction

A rapid population growth is a burden on the resources of many developing countries. Unregulated fertility, which contributes to such situations, compromises the economic development and political stability of these countries. Therefore, many countries consider

limiting population growth as an important component of their overall developmental goal to improve living standards and the quality of life of the people. This strategy is now enhanced by the availability of effective modern contraceptive methods since the 1960s.¹ Contraceptives were invented to prevent the normal physiological process of conception by various means². Christina S. Chu defines contraception as "Intentional prevention of conception through the use of various devices, sexual practices, chemicals, drugs, or surgical procedures. This means that something (or some behavior) becomes a contraceptive if its purpose is to prevent a woman from becoming pregnant".³

There are a number of contraceptive methods available to the couple. These methods can be divided based on several criteria such as natural/ artificial, traditional/modern, temporary/permanent, male/female, oral/injectables and intra uterine contraceptive devices (IUCD)⁴. Artificial contraceptive methods include barrier methods, intrauterine devices, hormonal methods and post conceptional methods. These are reversible contraceptive methods. Among reversible contraceptives failure rate is lowest in hormonal contraceptives. Most women of the world prefer hormonal contraceptive. Injectable contraceptives are currently the only widely used long acting hormonal contraceptives. Injectable contraceptives are DMPA (Depot Medroxy Progesteron Acetate) and NET-EN (Norethisteron Enanthate). DMPA is more preferred injectable contraceptive. DMPA is administered in a dose of 150mg every three months or 600mg every six months. As of 1996, about 12 million women in developing countries have been using DMPA injectable contraceptives.⁵ Uncontrolled growth of population is the most urgent problem in the country and population stabilization program has the top priority.

Bangladesh is at eighth position among top ten highly populated countries. Population problem is one of its major problems.

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Bangladesh has a population of 160 million and an annual population growth rate of 1.39 per cent. To control population burden Govt. of Bangladesh launched family planning in 1960 and strengthen in 1970. Now it is intensified and service reached up to the grass root level. Primary level health worker through their domiciliary service reach door of every house and counsel, educate rural women. Approximately 70 percent of the population of Bangladesh lives in rural areas. Female and male population ratio is 104.8:100. 30 per cent of the population is women of reproductive age. There are nearly 25.1 million are eligible couples.⁶ According to current estimates about 56 per cent of the eligible couples are being protected by the contraceptive method.⁷

Despite more long-term experience with DMPA, little is known about the characteristics, attitudes and needs of potential acceptors and actual users of this contraceptive. Studies on injectable contraception in Bangladesh are scarce. Such a study would be most beneficial given the potential value of the information to women's health, family planning and society in general.

Materials and Methods

This was a cross- sectional type of descriptive study which was conducted at Islampur village in Dhamrai Upazilla under Dhaka district from December 2011 to May 2012. By a non-probability purposive sampling 93 married women age between 18-59yrs were selected. Data were collected ensuring the privacy and confidentiality by face to face interview of the respondents using a pre- tested structured questionnaire. Descriptive statistics were analyzed by using SPSS statistical software version 16.

Result

The study was conducted on 93 married women in a rural area who are using injectable contraceptive.

In the study, the socio- demographic status of the respondents revealed that 50.54% were of age group 25-34 years, 92(98.92%) were Muslims. Educational qualification showed that maximum number of the participants were qualified up to secondary level (27.96%). 25.80%.were educated up to primary level, others (22.58% and 5.38%) were able to sign and illiterate. Among the respondents 88.17% were house wife and 5.38% were service holder. 50.53% had monthly income between 50000-10000Tk and 21.50% got below 5000Tk. 60.22% respondents had family members less than 4. Rest of the respondents had big family of 5-20 members. Regarding living standard 54.84% lived in semipakka house. (Table I)

Table 1 Socio-demographic profile of the respondents

Attribute	Frequency	Percentage
Age group (years)		
14 -24	15	16.12%
25 -34	47	50.54%
35 -44	29	31.18%
45 -54	01	1.08%
>55	01	1.08%
Religion		
Islam	92	98.92%
Hindu & Others	01	1.08%
Educational status		
Illiterate	05	5.38%
Able to sign only	21	22.58%
Primary level	24	25.80%
Secondary level	26	27.96%
SSC or Equivalent	11	11.83%
HSC or Equivalent & above	06	6.45%
Occupation		
Housewife	82	88.17%
Service Holder	05	5.38%
Business	03	3.23%
Day Laborer & Others	03	3.23%
Monthly income(taka)		
Below 5,000	20	21.50%
5,000 -10,000	47	50.53%
10,001 -15,000	15	16.13%
15,001 -20,000	09	9.68%
20,001 & above	02	2.15%
Family members		
Less than four(<4)	56	60.22%
Four or more than four(>4)	37	39.78%

In this study 97.85% respondent had no health problem. 35.48% were married between 12-16, 58.06% were married between 17-21, 4.30% were married between 22-26yrs. Regarding reproductive health of respondent's recent study revealed that highest number (62.37%) menarche started at the age of 11- 13 yrs and 65.59% had regular menstrual cycle. Age at marriage of respondents was 17-21yr (58.08%) and early marriage at 12-16yrs was (35.48%). It is evident from result that 50.54% conceived 1-2 times, 41.94% conceived 3-4 times, 5.38% conceived 5-6 times, 2.15% conceived above 6 times. The study result showed that 23.65% had 1 living child, 43.01% had 2 living children and 23.65% 3 living children, >4 children had 7.54% and 2.15% had no living child. On questioning age of last child was below 5 years 58.06% and 32.25% were 6-10 years 9.67% were above 11 years. (Table II)

Table II : Health problem & Reproductive health related information of the respondent

Health problem	Frequency	Percentage
Yes	2	2.15%
No	91	97.85%
Reproductive health	Related Information	
Age (yr) of menarche		
8 - 10	2	2.15%
11 - 13	58	62.37%
14 - 16	32	35.48%
Age (yr) at marriage		
7 - 11	1	1.08%
12 - 16	33	35.48%
17 - 21	54	58.06%
22 - 26	4	4.30%
27 - 31	1	1.08%
Menstrual Cycle		
Regular	61	65.59%
Irregular	32	34.41%
Age of youngest child		
Below 5 years	54	58.06%
6 - 10 years	30	32.25%
11 - 15 years	7	7.52%
Above 15 years	2	2.15%
Number of conception		
1 - 2 times	47	50.54%
3 - 4 times	39	41.94%
5 - 6 times	5	5.38%
Above 6 times	2	2.15%
Number of living children		
1 Child	22	23.65%
2 Children	40	43.01%
3 Children	22	23.65%
>4 Children	7	7.54%
No living child	2	2.15%

It is evident from result that 6.45% took injection before child birth, 36.56% took injection after birth of first child, and 56.99% were in other situation. The study revealed that 46.24% respondents got information from FWV/HA, 20.42% from Relatives, 18.28% from Husband, 5.38% from Doctor, 7.53% from others. The current study showed 48.39% women took injection 1-5 times, 23.65% took injection 6-10 times, 27.96% took injection more than 11 times. Regarding side effect after taking DMPA 75% respondents period was stopped, 17.65% had spotting during menstrual cycle, 5.88% had profuse bleeding, 42.65% complained of excessive weight gain, 41.18% had severe headache, 32.35% had abdominal discomfort 06.13% developed breathlessness & chest pain on minimum labour. (Table III & IV)

Table III : Source of information regarding injectable contraceptive

Source of information	Frequency	Percentage
MBBS Doctor	5	5.38%
FWA/HA	43	46.24%
Relatives	19	20.42%
Husband	17	18.28%
Others	9	9.68%

Table IV : Information's regarding Injectable Contraceptive user

Time of initiation of 1 st injection		
Time	Frequency	Percentage
Before child birth	6	6.45%
After birth of first child	34	36.56%
Others	53	56.99%
Frequency of injectable contraceptives		
1-5	45	48.39%
6-10	22	23.65%
>11	26	27.96%
Problems after injectable contraceptives		
Yes	68	73.12%
No	25	26.88%
Side effects after injection (Multiple responses)		
Stopped period	51	75%
Spotting in menstrual cycle	12	17.65%
Profuse bleeding	4	5.88%
Excessive weight gain	29	42.65%
Severe headache	28	41.18%
Abdominal discomfort	22	32.35%
Breathlessness & chest pain on minimum labour	8	10.61%
Others	4	5.88%

Discussion

This cross sectional study was designed to determine the characteristics of injectable contraceptive user in a selected rural community. Regarding socio-demographics characteristic most of the respondents (50.54%) were young aged women between 25-34yrs of age. A study in Planned Parenthood of the Rocky Mountains in US showed that the majority of the women using injectable contraceptive were younger age of 23-30 years old.⁸

In rural Bangladesh women are ignorant about birth spacing and they usually become interested in family planning after delivery of second child. As the area was Muslim majority, highest user was Muslim (98.92%). The opposite picture was found in a study in India because of Hindu majority population.⁹

Educational qualification of the respondents showed that maximum number of the respondents of recent study were qualified up to Secondary level (27.96%). 25.80% were educated up to primary level, others (22.58% and 5.38%) were able to sign and illiterate. Injectable contraceptive is suitable for illiterate and less educated women as it is convenient for them to use. WHO reproductive health and research revealed that in the developing countries injectable contraceptive is used mostly by the rural and less educated women.¹⁰ Our study also revealed that respondents were less educated and illiterate.

Occupational status of our study showed that most of the respondents (88.17%) were house wife. Among the

respondents 50.53% had the family income 5,000-10,000 taka. And then about 21.50% was the lowest as below 5,000 taka monthly. In a study in India revealed similar result that most of the users were house wife and from lower economic class.¹¹

Regarding reproductive health of respondent's recent study revealed that highest number of respondents (62.37%) menarche started at the age of 11- 13 yrs and 65.59% had regular menstrual cycle. Khan MM et al from ICDDR,B showed similar result in their study in Rural Bangladesh.¹²

In our study age at marriage of respondents was 17-21yr (58.08%) and early marriage at 12-16yrs was (35.48%). Among total respondents about 43.01% women using injectable contraceptive had 2 Children and 23.65% had either one or three. It is here to be mentioned that fertility declined dramatically in Bangladesh. Women reporting 5 or more children declined from 35.9% in 1991 to 17.9% in 2000-04.¹³ Respondents were asked about age of the last child 58.06% mentioned below 5 years and 32.25% mentioned between 6-10 years. It indicates that DMPA is an effective contraceptive for birth spacing.

The current study revealed that sources of information about injectable contraceptive were from primary health worker, relatives and husband were 46.24% 20.42% and 18.28% respectively. Community health workers of SEAR countries and Sub Saharan countries distribute Family planning materials and also push contraceptive injections during their door to door domiciliary visits.¹⁴

Our study showed only 10.75% respondents were aware about birth spacing took contraceptive injection 16-20 times and half of the respondents (48.39%) were less aware on contraception as they took contraceptive injection 1-5 times. Study in rural Uganda showed similar picture that a few women were conscious about their contraception and maximum percentage were less aware.¹⁵

Regarding post injection complication 72.12% had complication with in 6 months after DMPA injection. Complications related to menstrual irregularities were 75% had amenorrhea, 17.65% had spotting and 5.88% had heavy bleeding. Next highest number was 42.65% complained of excessive weight gain. Headache was complained by 41.18% and abdominal discomfort was complained by 32.35%. This finding corresponds to the common problem of DMPA mentioned by WHO¹⁴ and FDA of USA.

Conclusion & Recommendations

Injectable contraceptive (DMPA) is safe, effective, reversible contraceptive method and return of fertility is longer comparing with other reversible contraceptive method and most effective in birth spacing. Women of lower socioeconomic class are more motivated to use injectable contraceptive (DMPA). Rural women are conscious about family planning and health workers at primary level health care are playing an important role in disseminating

knowledge on family planning methods. Policy maker should consider these points and strengthen family planning service at grass root level.

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