ASSESSMENT OF PRACTICES AND PERCEPTIONS REGARDING VASECTOMY USING HEALTH BELIEF MODEL; A CROSS SECTIONAL SURVEY IN URBAN JHANG

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ABSTRACT

Introduction: Vasectomy procedure was introduced in the past 4-5 decades and this procedure has got the attention in global public health as role of men in reproductive health. It means men can play their role in family planning.

Study Design: A descriptive cross sectional study.

Place and Duration of Study: Study was carried in urban sector union councils, District Jhang, from Oct 2016 to Dec 2016.

Material and Methods: A descriptive cross sectional study was carried in urban sector union councils, District Jhang. A sample of 237 married male respondents chosen randomly was interviewed using pretested and validated questionnaire based on health belief model (HBM) was used. Data was collected and analysed by SPSS version 20.

Results: Out of 237 respondents, 236 (99.6%) respondents had knowledge about any of the family planning method, and 135 (57%) respondents had knowledge of vasectomy and only 1 (0.4%) respondent had used vasectomy method. Presently 15 (6.3%) people wanted to adopt this procedure while 37 (30.4%) replied they might adopt this procedure in future. Regarding perceptions about vasectomy by using HBM, 207 (87.7%) respondents considered perceived severity (unintended pregnancy) can be harmful to the health of their wives while 200 (84.4%) considered perceived susceptibility i.e. unintended pregnancy can happen to them, 107 (45%) considered perceived benefit as vasectomy a better way of family limitation, 208 (87.7%) considered vasectomy as potentially helpful in health of their wives by preventing repeated pregnancies. In perceived barrier 220 (92.2%) respondents considered vasectomy as social stigma, 104 (43.9%) people considered vasectomy affects their sexual drive. Cues for action in HBM was the views of respondents about how it can be promoted ,191 (80.6%) respondents were of the view that religious leader would play a major role in promotion of vasectomy practices. 196 (82.7%) respondents thought that proper vasectomy services can improve utilization. The association between education of respondents and knowledge of vasectomy was highly significant as the *p*-value was 0.01.

Conclusions: Most of the population under study was aware of the vasectomy procedure but its practice was poor. The target for adoption of the vasectomy practices can be obtained by modifying the intentions and behaviours of the population.

Keywords: Awareness, Knowledge, Practices, Urban sector, Vasectomy.

INTRODUCTION

The family planning has always been considered as a female domain. Whereas women lead a main role in contraception and men's job is supportive in nature. Lack of awareness, gender issue, misconceptions about male methods compounded by programmatic factors with excessive weight-age to female methods has led the minor use of male contraceptives[1]. Basket of different family planning methods is available at present for the marked population from which they can choose most appropriate methods according to their requirement[2]. Vasectomy is a permanent quota of birth control portion for men. It is a surgical practice that roots sterility in men. It blocks and ligates the vas deferens and preserve sperms out of the seminal fluid. It is one of the secured and potent family planning methods[3]. Vasectomy is the only presently available technique other than condoms that allows the

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man to take responsibility for preventing burden of unintended pregnancy. It is more common place than female sterilization in five countries of the world, namely: Bhutan, Canada, the Netherlands, New Zealand and Great Britain[4]. New Zealand has the highest and chief capital of vasectomy prevalence among espoused couples of reproductive age at 20%[4]. Knowledge and different attitude perspective towards vasectomy have been reported to have a significant role in the willingness to consent to promote such procedure. The perceptions may direct the information of men receive from varied sources, may vary in their accuracy, truthfulness and reliability. Failure to establish patients' encounter of accurate information may result in rejection of vasectomy by a few men. Culture and artistic beliefs can also play a significant role in influence of the attitude toward vasectomy. Even when men are acquainted of vasectomy, their information are more often incomplete or inaccurate[5].

The individuals' percentage that relies on vasectomies is markedly low in Asia[6]. The prevalence of vasectomy is on small-scale in developing countries. The gauge for measuring burden of vasectomy stays very low in position[6]. The prevalence of vasectomy in Muslim countries is almost negligible, due to strict prohibition (Fatwa's) with the exception of Iran- which have vasectomy prevalence of 2.7%. From year 1993 to 2003, an approximately 375000 Iranian people practiced this procedure. Vasectomy prevalence increase up to 3.5% from 0% and thus contributed at country level contraception rate[7]. In developing countries like Pakistan, the gap between vasectomy and tubal ligation is so vast and immense as the prevalence of vasectomy is 0.1% and female sterilization is 8.2% - reported by Population Reference Bureau (PRB). Failure rate of vasectomy is around 1% and female sterilization (tubal ligation) is 2% according to Katharine[8].

The rationale of my study was to focus on vasectomy practices which had several advantages over female sterilization method commonly used by the couples. Vasectomy procedure is very easy to practice, cheap, cost-effective, failure rate less than tubal ligation and time duration for the procedure was short. A little work was done on its awareness and practices and in my study area almost negligible. It was the only currently available method other than condoms that allows man to share his responsibility for preventing pregnancy and controlling the growth of population in Pakistan. It helps in prevention of unintended pregnancy and thus increases of CPR.

Objectives

To assess the knowledge and practices regarding male contraceptive methods andto determine perceptions regarding vasectomy using Health Belief Model in married male population of urban sector district Jhang.

MATERIAL AND METHODS

A descriptive, cross sectional study was done from 01 Oct 2016 to 31 Dec 2016 in urban sector district Jhang. The population of twelve urban union councils of district Jhang was taken into sample frame out of which first three urban union council were selected and then 79 respondents were chosen from each union council randomly. A list of married males who had three or more children was taken from demographer of population welfare department district, Jhang. The selected study population chosen randomly were interviewed and data collected. The study population was included all the married males having three or more children and whose wives ages were between 15-49 years, while all those married male who were unwilling to participate, having more than one wife or was living abroad or those married male whose espouse age was more than 49 years and having menopause were excluded from the study. Sample size was calculated through a formula of sampling by taking prevalence rate of modern methods of CPR in Punjab which as 17.6%, according to PDHS 2013-14, with level of confidence as 95% and margin of error as 5%, it came out to be 237, after anticipated 10% refusal rate. Population of urban sector district Jhang

was taken as sample frame and eligible couple (married male) was selected through balloting done in simple random sampling method. Data collection tool was developed through extensive literature search concluded on four parts. First part includes the socio-demographic and the employment questions. Second part was for assessing the family size and fertility regulation. Third part was for assessing family planning method knowledge and practices and fourth part

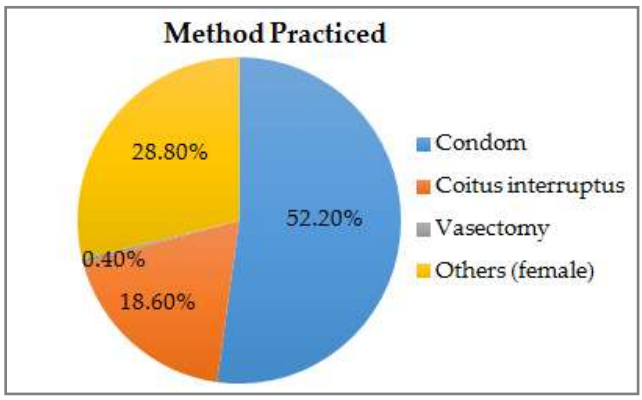

Figure-1(a): Use of family planning method.

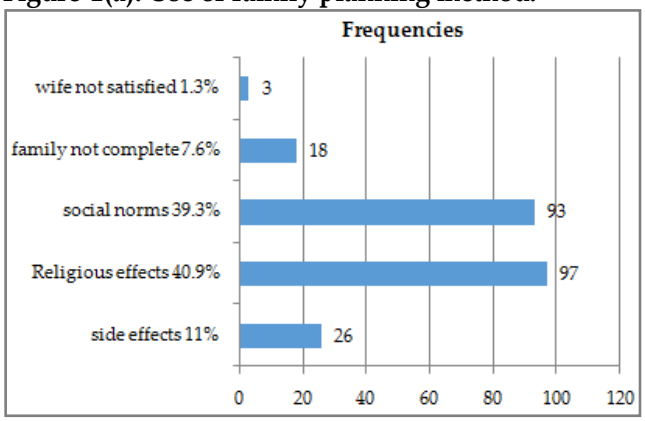

Figure-1(b): Reasons for not using FP.

was for assessing men perception for vasectomy by using Health Belief Model. The tool was validated by two specialists in family planning field and pretested on a small sample. The study variables were sociodemographic characteristics (age, sex, income, education level and duration of marriage), family size, knowledge about contraception and practices regarding family planning. Data was collected and analysed by SPSS version 20. A descriptive analysis was applied by computing means, standard deviations, frequency and percentages.

RESULTS

237 respondents were included in the study. The mean age of population sample was 37.15 ± 6.82 years. 236 (99.6%) respondents had knowledge of some family planning methods. 235 (98.3%) of them knew about the male condoms while 119 (52.2%) respondents were using condoms. 135 (57%) respondents had knowledge about male sterilization vasectomy while only one person had practiced this procedure. 217 (91.6%) people had information about discharge outside (coitus interruptus) while 44 (18.2%) people were using this procedure while rest of male population 73 (28.8%) from total 237 respondents were using female family planning method.

There were several barriers for vasectomy procedure not adopting as a method of choice. However, majority 97 (40.9%) of sample population considered vasectomy not to be adoptable due to religious beliefs. Second major cause 93 (39.3%) for not opting this procedure was concern about social norms while 26 (11%) people were reluctant to use it because they considered that it has negative effects on sexual performance and desires, while 18 (7.6%) answered their family was not completed yet. Small three (1.3%) respondents told their wife was not satisfied from this procedure. Figure showed their percentages.

The education of the respondents was highly associated with perception regarding vasectomy. Majority respondent who were ignorant/primary or received secondary education had more percentages of bad knowledge about 41.9% and 38.4% respectively while the respondents who had received post-graduate qualification have good knowledge (8.0%).

The *p*-value for the association between socio-demographic and knowledge was 0.001 which shows significant association between education of the respondents and knowledge.

There were different family planning sources among sample population. 54.9% population were answered that they received family planning method information from their friends or relative. Second big source of information was from media 29.1%. The coverage of information from Social Mobilizers or family welfare assistant working in population welfare department was 14%.

Table: Use of health belief model for assessing perceptions regarding vasectomy.

Variable	Statement	Yes	No/Don't Know
Perceived Severity	Population overgrowth a big challenge in our country?	206 (86.9%)	31(13.9%)
	Un intended pregnancy can harm the health of your wife	207 (87.3%)	30 (12.7%)
Perceived Susceptibility	Unintended pregnancy can happen to you	200 (84.4%)	37 (15.6%)
Perceived Benefit	Vasectomy is a better way of family limitation?	107 (45%)	130 (55%)
	Vasectomy can be helpful in handling financial matters regarding kids' raising?	131 (55.3%)	106 (44.7%)
	Vasectomy can be helpful for better health of your wife?	207 (87.3%)	30 (12.7%)
Perceived Barrier	Vasectomy can damage testes?	156 (65.8%)	81 (34.2%)
	Vasectomy is a social stigma in society	220 (92.8%)	17 (7.2%)
	Poor services facility a big challenge	196 (82.7%)	41 (17.3%)
	vasectomy can affects your sexual drive?	104 (43.9%)	133 (56.1%)
Cues to Action	Have you seen media campaign regarding vasectomy?	68 (28.7%)	169 (71.3%)
	Received counseling from FWA/SM?	64 (27.0%)	173 (73.0%)
	Awareness campaign can help to control population overgrowth?	209 (88.2%)	28 (11.8%)
	Religious leader can play important role in its practice?	191 (80.6%)	46 (19.4%)
Practices statements	Vasectomy done	1 (0.4%)	236 (99.6%)
	Ready to adopt vasectomy now	15 (6.3%)	222 (93.7%)
	Likely to adopt vasectomy in future	72 (30.4%)	165 (69.6%)

DISCUSSION

There was significant relationship between the educational status of respondents and their awareness regarding vasectomy; those respondents with higher post-graduation and graduation education had heard about vasectomy low than those with ignorant or primary education p=0.001. Similar kind of result was found in another study peri-urban communities of Ibadan, Nigeria in which there was a significant relationship found between the awareness of vasectomy and education[4]. In another study, was done in central India, the level of awareness regarding vasectomy among married male was 97% while its practices were 1%. The reason for high level of awareness was due to mass media campaign namely "Get a permanent Smile" for Ghanaian men with interventions to provide quality care client-centred vasectomy services. Another campaign ''Vasectomy Promotion project'' at Dar Es Salaam showed its results that few number of men were persuaded to go for vasectomy if service providers offers the service properly and made concerted efforts to educate people about its purpose, nature and inform them its availability of facility. Similar result 82.7% of my sample study population married male answered that availability of vasectomy service was a big challenge in its low prevalence[9].

In this study, good number of the respondents 55% had low intention to accept vasectomy. A similar kind of result was found in another study which was done in Kathmandu, Nepal where intention to accept vasectomy was low (61%)[10]. In contrary to another study done in Meerut, India where intention to accept the vasectomy was good ,acceptability among Hindus 93.23% and very poor acceptability among Muslims 6.76% this may be due to demographic variations[11].

In the previous studies, there were no viable assessments regarding the role of religious leaders in practices of vasectomy while in my study 40.6% respondents explained the main reason of not to have this procedure was due to religious effects. The second largest reason was the social norms (39.3%). 26 (11%) respondents were worried about its side effects while 18 (7.6%) had their family not completed yet. Inclusion of religious leaders was thought to be an important consideration for improving vasectomy practice by 191 (80.6%) respondents. A positive clue about religious leaders (Muftis) might play an important role in its practices as well as awareness campaign from mosque to mosque regarding role of men in family planning and share his responsibility in prevention of unintended pregnancy. It might persuade or divert the intention towards vasectomy and thus preventing the burden of unintended pregnancy, improving the health of mother and prosperity.

As approaching to men will be a winning strategy, the intention to practice vasectomy method as contraception in the near future would be a potential demand of males for utilizing this family planning service. The potential demand in this study was found to be 6.3% and the percentage of those who thought that they were would likely to adopt this procedure in future 30%. It was significantly lower than the potential demand observed in a study conducted in district, Nagpur Central India where it was found to be (21.3%), the reason may be because in this study those respondents were excluded if either he or his wife were not satisfied, and the awareness level was very low while in that study the awareness level was (94.2%)[12].

The stigma or myths (92.2%) regarding use of vasectomy that it would effects the sexual desire leading towards libido, a form of castration provoke more attention to divert this dilemma with the help of effective supply of information, regular delivery of education by the facility provider or mass media campaigns would lead to fruitful results.

Another topic of discussion of my study was to assess when vasectomy should be done after having how many number of children. As vasectomy a permanent, irreversible method, majority 61.4% respondents gave their feedback that it should be done after having three to four children. 30% people acknowledged that vasectomy should be done greater than five children. 5.7%respondents told that it should be done after one to two children.

CONCLUSION

Most of the population under study was aware of the vasectomy procedure but less well aware of its practices. As for the practices of vasectomy concerned, labourer has more good practices. The reasons behind this are the financial issues and burden of unintended pregnancy as well as tensionless fulfilment of sexual desires. The target for adoption of the vasectomy practices can be obtained by modifying the intentions and behaviours of the population. There is requirement to support the population to attend the conferences, group meetings and seminars which entirely based on the awareness of vasectomy and to encourage vasectomy interventions.

1. There is demand to give effective supply of health education with collaborative information regarding vasectomy and its practices.
2. Scaling up of information through 'Imam Masjid' and group meeting to population is one of the most effective strategies for its practices that require proper counselling

through Fatwa's, plan to establish vasectomy services, adequate monitoring and proper evaluation.

3. The social stigma associated with vasectomy minimized through proper counselling.
4. The results acquire from this research are the way forward for other researchers, health professionals and policy makers to construct more evidences and constitute a platform for policy development.

LIMITATION OF STUDY

1. The target for selection of specific population were not entirely achieved instead of simple random sampling.
2. The time constrained study duration.
3. A limited study area as only urban sector of district Jhang was selected from the province, Punjab.

CONFLICT OF INTEREST

This study has no conflict of interest to be declared by any author.

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