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## An Online Randomized Knowledge, Attitude and Practice (KAP) Study on Contraception.

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### ABSTRACT

India is the second most populated country in the world having a rapidly growing-population which is currently increasing at the rate of 16 million each year. At that situation to estimate the knowledge and prevalence of contraception among people an online randomized survey has been done. An anonymous online questionnaire has been developed and circulated among general public to assess the knowledge, attitude and practices regarding contraception and related factors. Majority of people (around 92.9%) were aware of the existence of contraceptive methods. The most commonly used contraceptive was condom 26.2%. Majority (65.1%) did not use any kind of contraceptive methods. About 26.2% used Condoms, minimum (15.1%) used pills, and 5.6% used withdrawal method. Around 34.9% participants felt different types of issues after using any contraceptive tools. The study highlights that awareness does not always lead to use of contraceptives. A lot of educational and motivational activities and improvement in family-planning services are needed to promote the use of contraceptive and reduce the high fertility rate & also to reduce the fatality due to sexually-transmitted diseases. The study shows a promising direction about the general perception of contraception and necessitates the availability and accessibility of affordable contraception means to people.

**Keywords:** Knowledge, Preferences, Contraceptive methods, contraception.

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## INTRODUCTION

The global population today stands at over 7.7 billion as of 2019 and our country is the second most populated in the world having a rapidly growing population which is currently increasing at the rate of 16 million each year[1]. A rapid population growth is a compulsion on the resources of many flourishing countries. Uncontrollable fertility, which contributes to such condition compromise the financial improvement and political position. So, many countries worry about limiting population growth as a main element of their overall improvement goal to enhance the living customs and the quality of life of the people. Even though there is comprehensive appearance of various types of contraceptives, the rate of population growth and undeliberate pregnancies is still high. Use of contraceptives can prevent from sexually transmitted diseases like HIV, Gonorrhoea, Syphilis, Genital Herpes etc [2]. Contraception is the willful use of implied process to prevent unwanted pregnancy as a result of sexual activity. Standardized level of knowledge of contraception provide a useful measure of the advancement of intelligence, education and communication functions and help to recognize the areas that need to be strengthened [3].

Population Control is one of the major global concerns today because impact of excessive population can be reflected into various mandatory resources in our daily life [6]. This study has been implemented to assess the knowledge, attitude and practice of contraceptive techniques in the reproductive age group of people. Contraceptive advice is a component of good preventive health care. It is very much necessary to stabilize the population-growth and to preserve the natural resources to future generations. An ideal contraceptive should be suitable an individual's personal, social, socio- economic factors which have a vital role in family planning acceptance [5]. Usually there is very less open discussion about the use of contraceptives among the common people. The objective of this present study was to identify people's perception, knowledge and approach towards application of Contraception.

## MATERIAL AND METHODS

It was an online randomized Knowledge Attitude Practice (KAP) study which was conducted using Google form through random sampling method.

### Study Type

This was an observational, cross-sectional, questionnaire-based study.

### Collection of Data

The study was conducted with the common people through predesigned online Google form.

### Study Period

The study was conducted during March 2020 to April 2020 when the people around the globe are almost locked in their homes due to corona pandemic declared by WHO.

### Study Subject

Google form links were circulated through several online media to get responses from the common people during the study period.

### Inclusion Criteria

Participants of minimum age of 16 years were considered for the study.

### Exclusion Criteria

Unwilling or incomplete responses were not considered for the study.

**METHOD**

The questionnaire consisted of two parts. One was the demographic criteria including age, gender, education, occupation and another was the knowledge, attitude and perception regarding contraception. Overall, there were 24 questions in the questionnaire. The collected data was analyzed with regard to the information given by the subjects according to the set of questionnaire items and the analyzed data is presented in the following tables. All the data were presented as frequencies and analyzed as in percentages.

**RESULTS AND OBSERVATION**

In the present study a questionnaire based survey was done in online mode and total of 126 participants completed the survey questionnaire.

From table no. 1, the demographic data showed 80 (63.5%) people belonged to the age group of 16-25 years and most of the respondents i.e. 75 (59.5%) participants were male & rest 51(40.5%) participants were female. From the Table:1, it can be analyzed that among the 126 participants in the survey group, majority of participants 53(42.1%) were graduate, 51(40.5%) participants had education up to higher secondary, and rest were having post-graduation or higher degree. Among all the participants, 102(81%) were unmarried. Majority of participants like 84 (66.7%) belonged to nuclear family and 42 (33.3%) belonged from extended family where they have few member extra than their parents. Considering the locality, majority of the participants i.e. 60(48.4%) were from urban area, 42(33.9%) participants from semi-urban or from small township and very few i.e. 22(17.7%) participants are from rural/ village area. Now if the focus is on the occupation of the participants then mostly the respondents including 77(61.1%) participants were students and 30(23.8%) participants were engaged in private job.

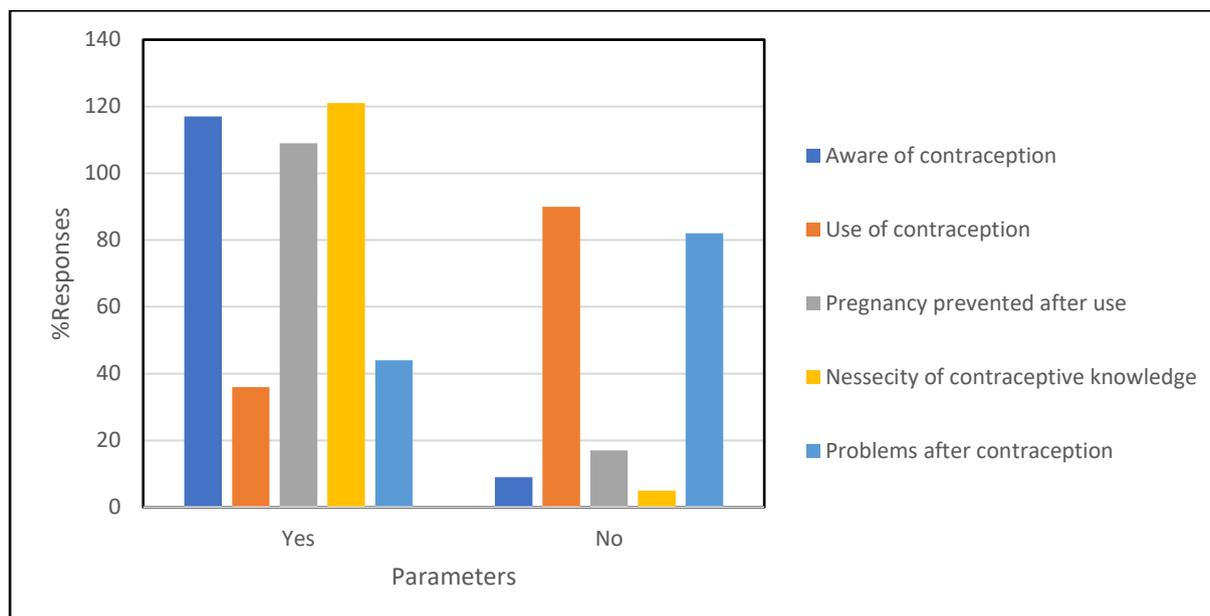
**Table 1: Socio-Demographic Characteristics**

Sample Characteristics	Parameters	Number of population	Percentage
Age	16-25	80	63.5
	26-35	36	28.5
	36-60	10	8
Sex	Male	75	59.5
	Female	51	40.5
Educational Qualification	12 <sup>th</sup>	51	40.5
	Graduation	53	42.1
	Post-Graduation	18	14.3
	PhD	4	3.2
Marital Status	Married	23	18.3
	Unmarried	102	81
	Divorced	1	0.7
Family Type	Nuclear	84	66.7
	Extended	42	3.3
Occupation	Student	77	61.1
	Service (Private)	30	23.8
	Service (Govt)	10	7.9
	Housewife	6	4.8
	Unemployed	3	2.4
Locality	Urban	61	48.4
	Semi urban	43	33.9
	Rural	22	17.7

**Data were presented as frequencies and analyzed as in percentages (n=126).**

From the Figure: 1 it can be analyzed that majority of participants around 117(92.9%) heard about contraception and 9(7.1%) participants didn't hear about contraception. Among 126 respondents, 90(71.4%) participants used any type of contraceptive methods but 36(28.6%) participants didn't use that due to any

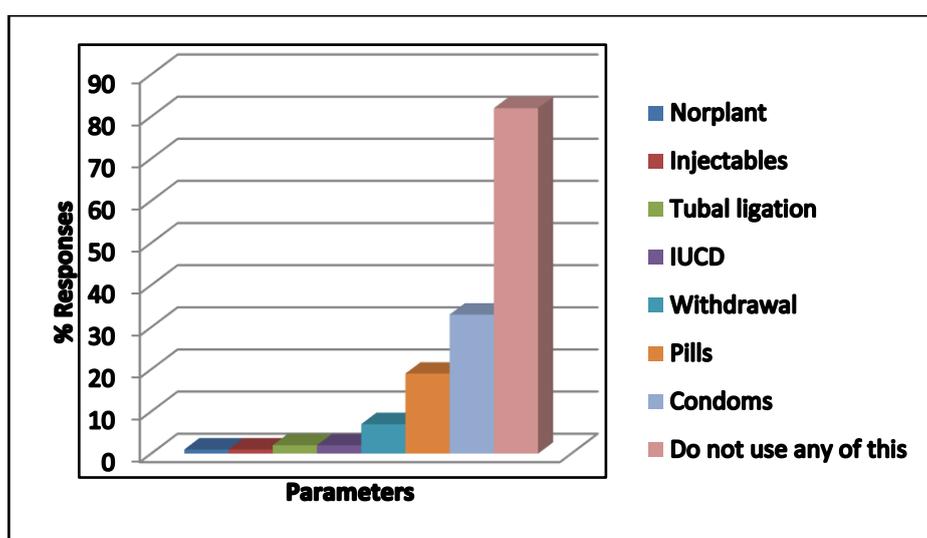
particular reason. 109(86.5%) people revealed their opinion that after using this contraception, pregnancy can be prevented but unfortunately the rest of the people i.e. 17(13.5%), thought that after using this contraception pregnancy might not be prevented.



**Figure 1: Represents the experience & knowledge of contraception among common people. Data were analyzed as in percentages (n=126).**

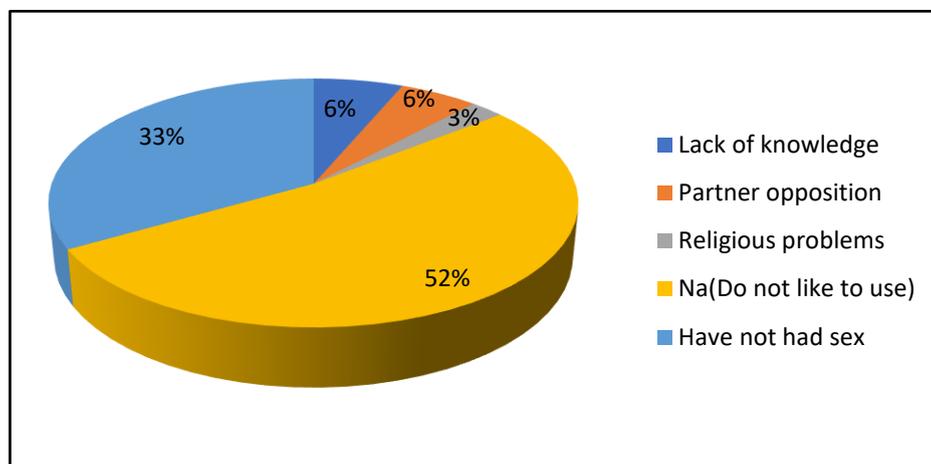
Majority of participants around 121(96%) people think that contraception knowledge is a mandate now-a-days but only 5(4%) participants stated it's not that much important. After using any contraceptive tools 82(65.1%) number of participants didn't feel any kind of problems like irritation or any sort of side effects but 44(34.9%) people felt some problems after using this contraception.

From the Figure: 2 it can be analyzed that most of the respondents around 82 (65.1%) did not use any kind of contraceptive methods. On the other hand, about 33(26.2%) participants used condoms to prevent pregnancy & STD, only 19(15.1%) participants used pills, 7(5.6%) participants used withdrawal method, 2(1.6%) participants used IUCD and Tubal Ligation Vasectomy method and just 1(0.8%) participant used injectable and Norplant method.



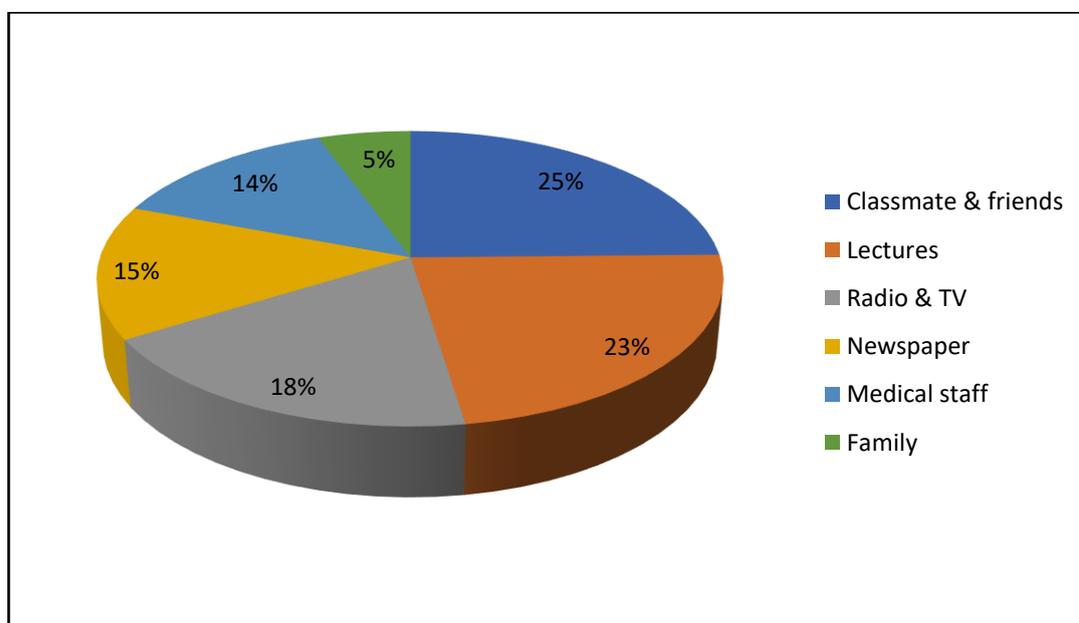
**Figure 2: CONTRACEPTIVE METHOD USED. Data were analyzed as in percentages (n=126)**

Figure: 3 represented the different reasons behind not using contraceptive methods. 33% of the respondents stated not having sex were the reason behind not using contraceptive methods, sometimes it might be due to partner's opposition (6%), 6% had lack of knowledge to use any contraceptive tools as protective measure, other 3% of total participants had religious issues regarding using contraceptives. But majority of the respondents i.e. 52% did not like to use any contraceptives tools



**Figure 3: Representation of the reasons for not using contraceptive methods. Data were analyzed as in percentages (n=126)**

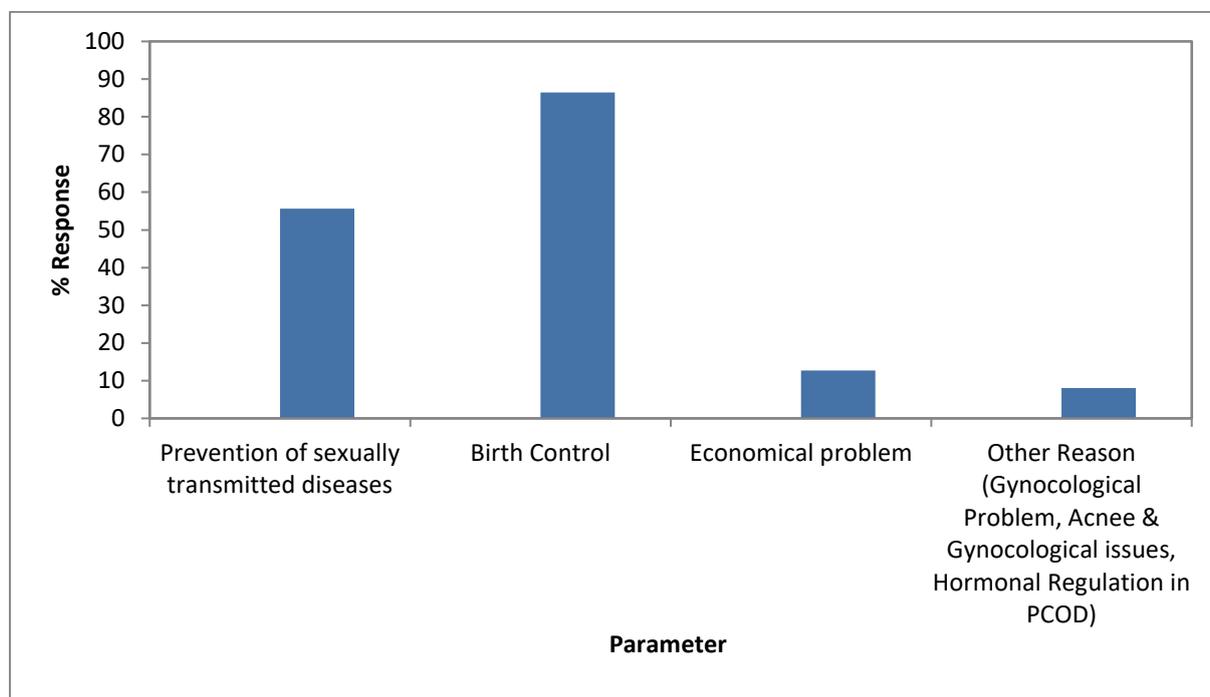
Majority of the participants i.e. 81(64.3%) opined to the fact that they got the information about contraception through classmates and friends, 59.5(75%) from lectures, 61(48.4%) from Radio & Television, 48(38.1%) participants from newspaper, 45(35.7%) participants from medical staff and 18(14.3%) participants from their family members, relatives (Figure 4).



**Figure 4: Different sources of information about contraceptive methods. Data were analyzed as in percentages (n=126)**

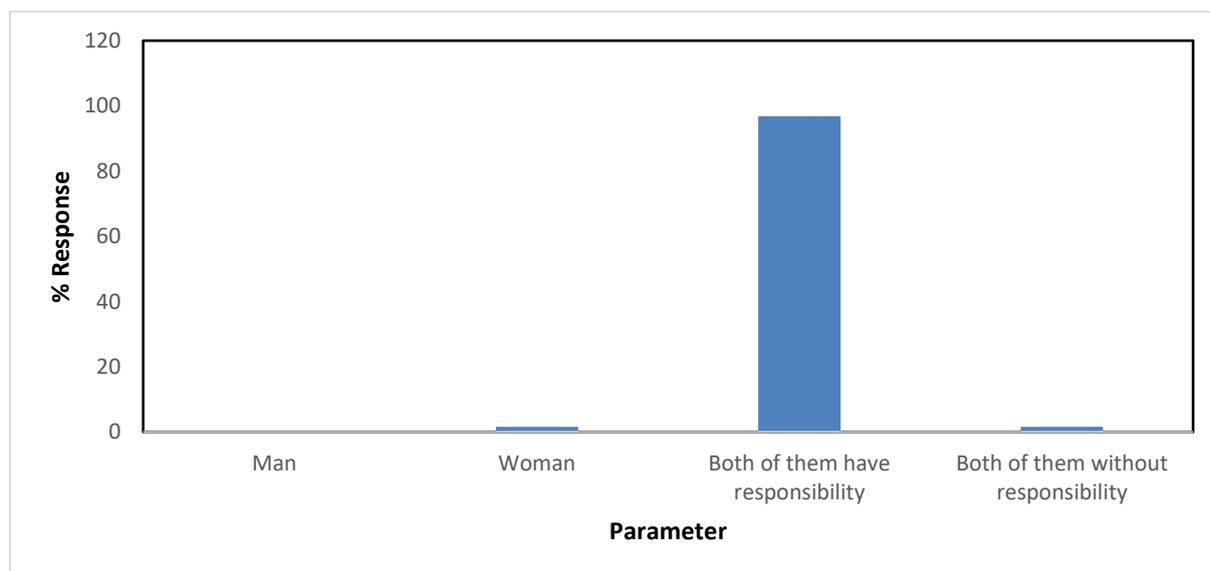
From the figure 5 it can be analyzed that out of 126 people 70 (55.6%) people though that the main reason for using contraceptives is to prevent the sexually transmitted disease, like Syphilis, AIDS, Non gonococcal urethritis, Gonorrhoea, Condylomaacuminatum, Genital herpes, Hepatitis B were in their knowledge. Near about 1% people stated these are not the sexually transmitted disease and 10% people had no idea about

it. Data also revealed that out of 126 participants, 109 (86.5%) revealed that birth control is the reason for using contraception whereas 16 people (12.7%) agreed that economical problem is the reason of that. But according to 10 (8%) respondents, gynecological problems, acne & hormonal regulation in polycystic ovarian disease are the main reason of using any contraceptive methods.



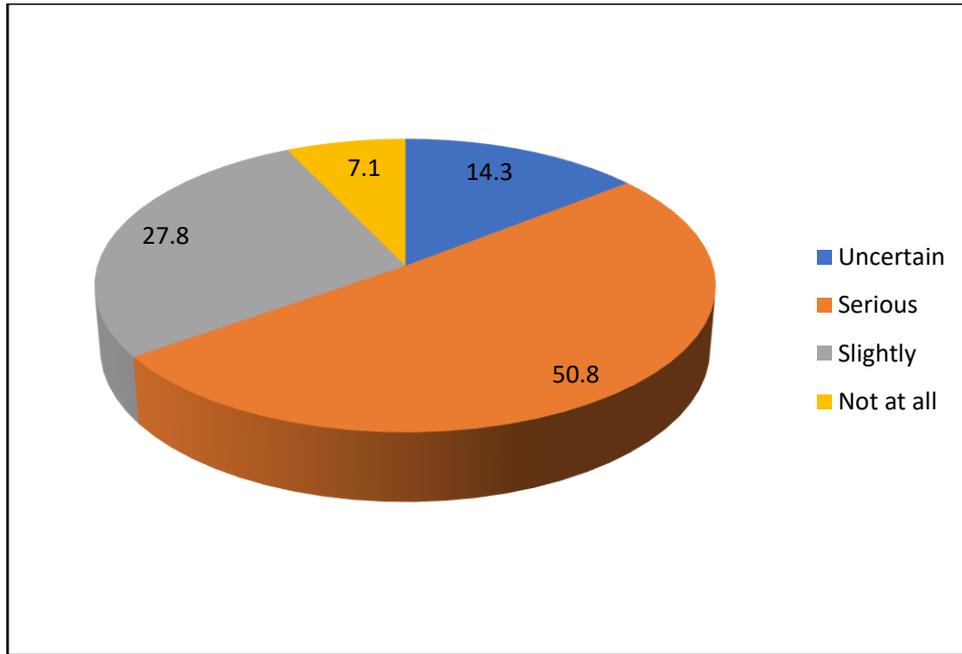
**Figure 5: Knowledge on the purpose of using contraceptives. Data were analyzed as in percentages (n=126)**

From the figure 6 it can be analyzed that out of 126, majority of the participants i.e. 122 (96.8%) participants agreed to the fact that both men and women should be responsible for contraception.



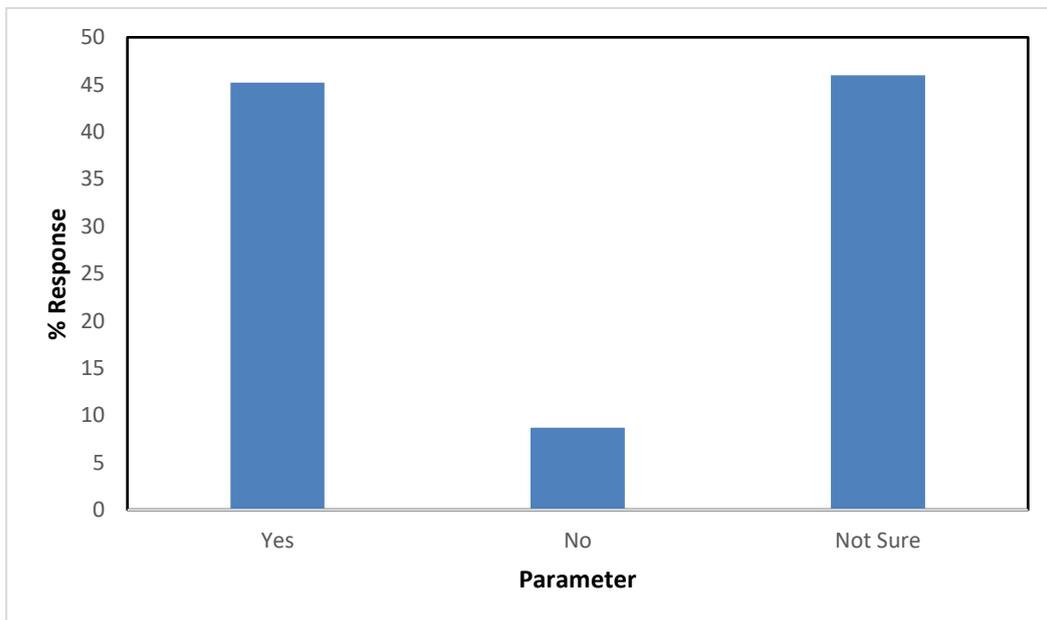
**Figure 6: Responsibility of contraception. Data were analyzed as in percentages (n=126)**

Among all the respondents, 64 number of people (50.8%) agreed that abortion can affect seriously on women's physical & mental health but 35 people (27.8%) think that it could affect slightly and rest of the very few people used to think there is no effect on women's physical & mental health after abortion (Figure: 7).



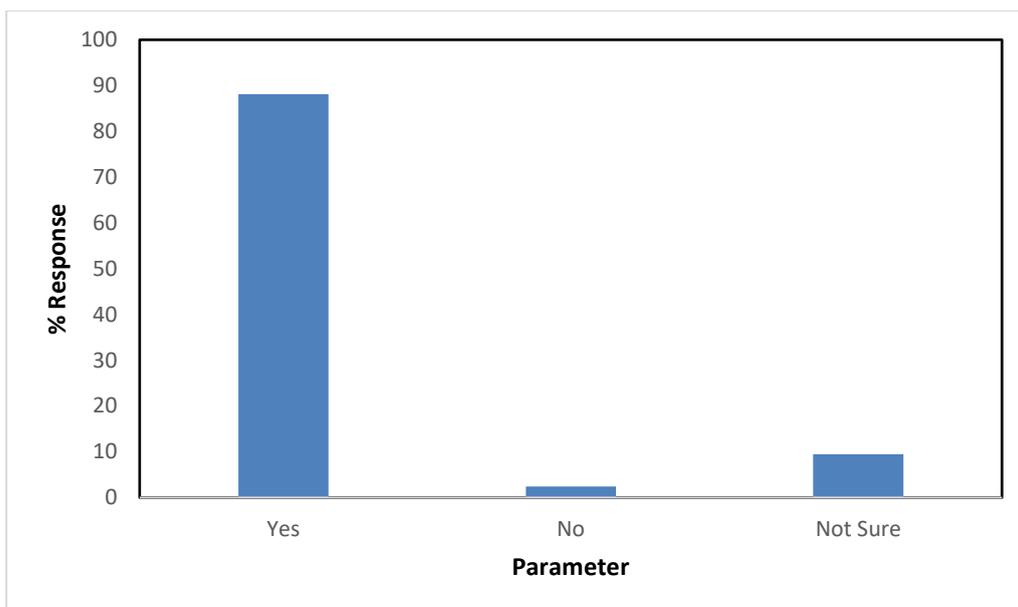
**Figure 7: Effect on women's physical & mental health after abortion. Data were analyzed as in percentages (n=126)**

From the figure 8, it can be analyzed, out of 126 participants, 57 (45.2%) opined that there is an effect on pregnancy after abortion but 11 people (8.7%) don't think such whereas 58 (46%) respondents were not sure about it.



**Figure 8: Effect on pregnancy after abortion. Data were analyzed as in percentages (n=126)**

From the figure 9, it can be analyzed that out of 126 participants, maximum number of responses i.e. 111 people (88.1%) supported to the fact that there is an obvious necessity of sex-education at early age in course curriculum but very few denied or were not sure about it.



**Figure 9: Necessity of Sex-Education at early age in Course Curriculum. Data were analyzed as in percentages (n=126)**

### DISCUSSION

Contraception is a major aspect of reproductive health and plays an important role to prevent an unwanted pregnancy. It is therefore a crucial factor in reduction of induced-abortion rates and improvement in maternal & child health care [7]. Present study was carried out to evaluate the knowledge, attitude, and practice on contraception among the common people through an online questionnaire based survey. This is a web-based randomized trial where we found out most of the participants were students and this study also shows that instead of being students, they have sound knowledge about the contraception and the related matters. Total 126 responses were recorded and the socio demographic characters of the study population revealed the majority of people (63.5%) were in the age group of 18-25 years, 59.5% of the respondents were males rest were females. It was good to notice that most of the females and males who had sex are equally aware of different contraceptive methods as well as emergency contraception. The reported association is common in some other studies or surveys.

In the present study, majority of them 42.1% were graduate. About 40.5% of them were educated till higher secondary. Among the volunteer 14.3% were completed their post-graduation and 3.2% were doctorate. As in this study there is a majority of students & unmarried people, so it highlights a low use of contraception .Among the married people, majority has used at least one of the contraceptive methods reflecting the growing literacy rate & social welfare services in various parts of the country. Out of 126 participants 92.9% heard about contraception and only a few of them were unaware about it. In the term of locality, 48.4% of the participants live in urban area, 33.9% live in semi-urban and 17.7% live in rural area. Present study data also revealed that people from urban area felt a less no. of problems than that of the rural and semi-urban areas after using contraception. This may be because of growing awareness and difference in lifestyles in urban areas.

Majority of 52% did not use any kind of contraceptive methods which is a contrary to the study conducted on 2012 at Udupi, Karnataka by Sonam Zangmu Sherpa *et.al.* where results showed that about 38.23% had never used contraception [2]. The result from this study regarding preferable methods reveals that about 26.2% used Condoms which is supported by the study reports of the same KAP studies where 22.1% preferred condoms but this report is contradicting with a KAP study done on 2018-2019 at Jodhpur, Rajasthan where a majority of 58% had chosen condoms as a method of contraception.[8] The present study data revealed the respondents stated the usage of other contraceptive methods like pills, IUCD and Tubal Ligation Vasectomy method Injectable and Norplant methods also other than condoms.

Present study focused on the reason of not using contraceptive method because of some religious beliefs (3%), which was supported by the study of Meenakshi Gothwal *et.al.* on 2018-2019 at Jodhpur,

Rajasthan where 3.4% of participants had mentioned about confliction of religious issues with use of contraception.[9] On the other hand 2.8 % of the total respondents had chosen partner opposition as a cause of not using contraceptives which was totally contradicting with the study by Gupta *et.al.*, where almost about 37.1% of respondents opined to this fact.[11] In spite of all these majority of people (52.5%) stated that they do not like to use contraceptive method.

The most important source of information about contraception was classmate and friends. From lectures 59.5%, from Radio & TV 48.4%, from Newspaper 38.1%, from medical staff 35.7% and from family 14.3% (Figure 4) which is consistent with the KAP study by Mahvish Qazi *et.al.* on 2019 in northern part of India where 45% had gained knowledge from Media i.e TV & Radio followed by 15% from friends & family but contradictory in terms of getting information from medical staffs where the percentage is only 10%.[9]

Most of the people 86.5 % from all age groups and educational background feel that Birth Control is probably the main reason of using contraceptives from which we can interpret that they all are concerned about a proper family planning. Similar findings have been reported in the KAP study by Thapa P *et.al.* in Dharan sub-metropolitan city where almost 68.9% of the respondents feel Birth Control being the main benefit of contraception.[10] Almost 55.6% people think that contraception is necessary for the prevention of different sexually transmitted disease like syphilis, AIDS, gonorrhea, genital herpes etc (Figure 5). It was good to observe that benefits of contraceptives were well known to almost all the participants in our survey.

Almost half of the participants from our study (50.8%) think that abortion can have serious impact on women's physical and mental health which can lead to depression or other severe health issues. Some of them feel that women can suffer from moderate to minimum physical and mental health problems after undergoing an abortion (Figure 7). The differences in their responses may be because of lack of adequate knowledge regarding this issue. Some of the respondents feel that an abortion doesn't cause any problems in future pregnancies (45.2%). A few of them especially females think that an abortion can be the reason for complications in future pregnancies and hence they intend to show a negative attitude towards post-abortion family planning. Many of them don't have any idea whether abortion would have any impact or not (Figure 8). Though Sex-education is not so popular in India, but most of the people in our survey (88.1%) feel that it is necessary and should be included in the educational course curriculum to spread the awareness to the people belong to certain age-groups (Figure 9).

## CONCLUSION

The online randomized KAP study showed that majority of people had knowledge, though not completely, but when it comes to utilization of various contraceptive methods, it was suboptimal. In this study, author observed that with increasing educational and socioeconomic status contraceptive practices is increasing. There was a significant association between educational qualifications, marital status and family background, with the extent of knowledge about contraception. The emersion in the knowledge about family planning has been mainly due to the media popularizing condoms. This shows that there in an instant necessity for strong motivation for both gender (men & women) to use them. Media and other social networking sites have played a significant role in spreading the awareness among the people, regarding proper use of contraceptives. The approach towards using of contraceptives in adolescents and students are completely different from that of older married couples which may be because of several social, developmental and psychological influential factors. The various reasons for not using contraception were lack of complete knowledge of various methods, religious problems and opposition from husband. This highlights the need for conduct of facilities, so that all the compatible couples can access valid information concerning all the contraceptive methods. Although the exact number of sexually active young adults are not known from this study but a proper education about the sexuality and importance of the use of contraception is needed. A good motivation must be necessary among the teenagers and also older married or unmarried couple to aware them about the effectiveness and the appropriate use of all the contraceptive methods. This can be beneficial to control the rate of unwanted pregnancies, growth of population in our country and obviously the several sexually transmitted life threatening diseases. Sustained efforts must be put to increase the appropriate knowledge and awareness regarding contraceptive use. This process can be initiated by facilitating the access to more accurate information, social and welfare activities etc. This will keep them informed with the implementation of various new practices as well as help them suggest best suitable family planning methods. Comprehensive Sexuality Education must be made compulsory among adolescents for improving their

attitudes related to sexual and reproductive health and behavior. All married or unmarried couple should be provided with accurate information related to contraceptive use on their visit to medical practitioners to encourage them to adopt a proper family planning. Interpretations and understanding of contraceptives should be explored and it is very important to make people aware of the differences between permanent and temporary contraception. Supplies of general contraceptives must be made available, accessible and affordable to public with ease.

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