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## Research Article

# KNOWLEDGE, ATTITUDE AND PRACTICE OF FAMILY PLANNING AND CONTRACEPTION AMONG THE ENGINEERING COLLEGE STUDENTS IN DISTRICT MIRZAPUR, UTTAR PRADESH, INDIA

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### ABSTRACT

**Introduction:** India is the second most populated country in the world, we are still worse off than China in family planning and access to contraceptives. The country launched a nationwide Family Planning Programme in 1952 but the national fertility rate is still high which is leading to long term population growth in India. Family planning is not only confined to birth control and contraception. It is important as whole for the improvement of the family's economic conditions and for the better health of the family members.

**Aim:** To assess the knowledge, attitude and practice of family planning and contraception among the college students.

**Material and Method:** A cross sectional study was conducted in the Government Engineering College, in Mirzapur during the month of July 2018 to evaluate the knowledge, attitude and practice of family planning and contraception among 468 students in college. A total of 270 males and 198 female students were involved in this study. Subjects were selected by using a simple random sampling technique. The data was collected by using a structured questionnaire which has four sections. Descriptive statistic was used for analyzing the data.

**Results:** The knowledge about family planning among student was 95% and 82% students heard about the contraceptives. Most commonly known contraceptive among them was condom 88%. For most of the students contraceptives was used to prevent unwanted pregnancy 42% and provide protection against sexually transmitted disease (AIDS) 25%. About 72% students thought that contraceptive use was beneficial. Most common reason for not using contraceptives was religious beliefs 25%. Only 42% student responded to the use of contraceptives and among them most commonly use contraceptive was condom 75%.

**Conclusion:** The level of awareness about family planning and contraceptive methods was quite satisfactory, but the level of contraceptive use was not upto the mark. Talking on such issues is still considered as taboo in many parts of the country so we need to conduct awareness programmes and educate the people regarding the importance of family planning and the use of contraceptives.

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### INTRODUCTION

The current population of world is around 7 billion out of which one-sixth is the Indian population. According to the 2017 revision of the World Population Prospects the population of India is 1,324,171,354.<sup>1</sup> India is projected to be the world's most populous country by 2024, surpassing the population of China.<sup>2</sup> India was the first country in the world to implement a National Population Control Programme in 1952, we are still

struggling to contain baby boom.<sup>3</sup> A lot of efforts and resources have gone into the National Family Welfare Programmes, but the returns are not commensurate with the inputs to control the population. The natural growth rate of country is still high.<sup>3</sup> High growth rate of the population is of the major problems facing by the country. The 1991 Census recorded a marginal decline in the annual growth rate of population from 2.22% in 1971-81 to 2.11% in 1981-91 but this decline still means an additional increase of 18 million people to the

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country's population per year.<sup>4</sup> The fast growth rate of population means that the economy has to grow faster to protect the already low level of per capita accessibility of food, clothing, housing, employment and social services.<sup>4</sup> Millions of people are still living under conditions of poverty and deprivation. Along with this, the environmental degradation which is associated with unchecked growth of population carries the inherent risk of natural calamities and disasters.

Uttar Pradesh, is a state located in North India, it had a population of 199,812,314 people as of march 2011.<sup>5</sup> It is one of the most populous state in the Republic of India. The population of this state is spread across 18 divisions and 75 districts. 16% of the nation's total population lives in Uttar Pradesh. The growth rate of this state is 20.23 percent.<sup>5</sup>

Socio-economic development and well being of a society can be affected by the population, being one of the most populated state it has led to the establishment of family planning programmes.<sup>6</sup> Family planning is adopted by an individual or a couple upon the basis of knowledge, attitude and responsible decision in order to decide when to have child, avoid pregnancy, timing and spacing of the children that they want and also to protect against sexually transmitted disease.<sup>7,8,9</sup>

There are two major methods of family planning the traditional method (coitus interrupts) and modern methods. The introduction of the modern methods had led the world to avoid about 400 million unwanted pregnancies, reducing high risk pregnancies and ultimately reducing the number of maternal deaths.<sup>10</sup> Despite the fact that contraceptive use has increased over a period of time, there exists a Knowledge Attitude and Practice-gap regarding contraception.<sup>11,12</sup>

Talking on such an issues in public is still considered a taboo in India. The reasons for not using any family planning methods are lack of knowledge and education, religious belief and fear of side effects.<sup>13</sup> None of the study has been conducted in the district of Mirzapur, Uttar Pradesh. So we conducted a study to investigate the knowledge, attitude, practice of family planning and contraception among students.

**MATERIAL AND METHOD**

A cross sectional study was conducted in the Government Engineering College, in Mirzapur, a district of Uttar Pradesh during the month of July 2018. It was done to evaluate the knowledge, attitude and practice of family planning and contraception methods among students enrolled in college. A total of 520 students were enrolled in college out of which 468 students fulfilled the criteria of study. About 270 males and 198 female students were involved in this study.

**Inclusion criteria:** Students enrolled in the engineering college, who were willing to participate in the study and age in between 18-30 years.

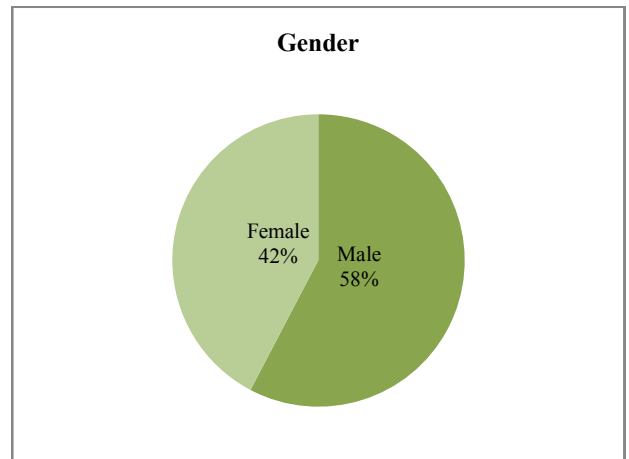
**Exclusion criteria:** Those students who are below 18 years and above 30 years and were not willing to participate in the study were excluded.

The study subjects were selected by using a simple random sampling technique. A self-administered questionnaire was prepared after an extensive review of previous literature, which consists of 4 sections as follows: general, knowledge, attitude and practice. The general section tells about the socio-

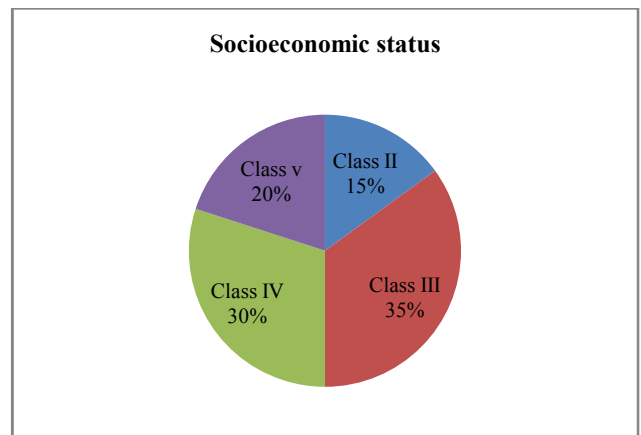
demographic data like age, gender, socio-economic status, geographical variation (rural/urban) and religion. A pilot study was conducted among 45 students to know about the feasibility of the study. Ethical committee clearance was taken and also permission from the principal of Government Engineering College was obtained. Informed consent was taken from each individual by informing him or her about the purpose of the study. They were also provided assurance of anonymity and confidentiality of data. Any person who did not agree to participate was excluded from the study. The confidentiality of each respondent was maintained. Descriptive statistics was used for analyzing the data.

**RESULTS**

Out of 468 students 270 (57.6%) were males and 198 (42.4%) were females (pie chart 1). Among the respondents, mean age was 22 years. 15%, 35%, 30%, and 20 % students belong to upper middle class (class II) , middle class (class III), lower middle class (class IV) and lower class (class V) of socioeconomic status<sup>14</sup> respectively (pie chart 2).

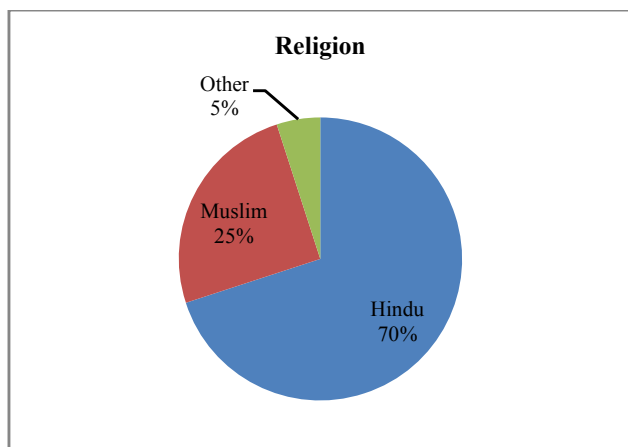


**Pie Chart 1** Gender Distribution

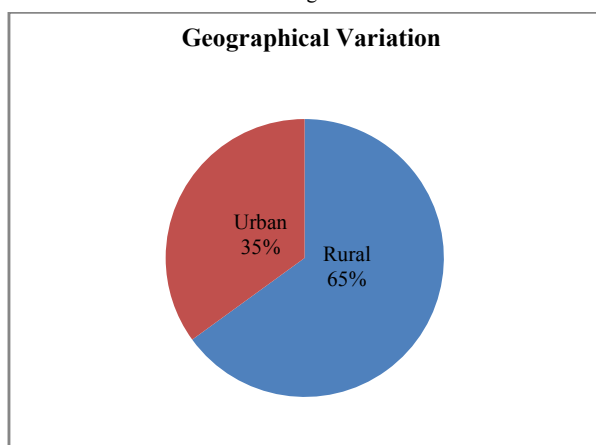


**Pie Chart 2** Socioeconomic status

70% of them were Hindu, 25% were Muslims and 5% belong to other religions (Sikhs, Christian, Jain, Buddhism) [pie chart 3]. 65% were from the rural background and 35% were from the urban background [pie chart 4].



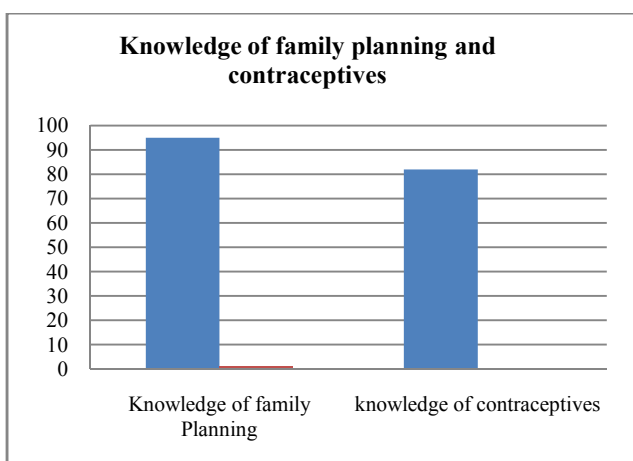
Pie Chart 3 Religion distribution



Pie Chart 4 Geographical Variation

### Family Planning and Contraceptive knowledge

About 95% (444) of them had heard about family planning and 82% (383) had heard about contraceptive methods [graph 1].

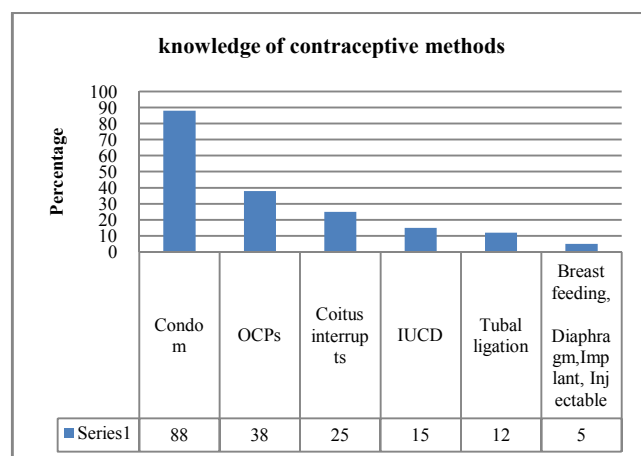


Graph 1 Knowledge of family planning and contraceptives

### Contraceptives Methods

Many of the students 88% (411) knew about condoms, 38% (177) had knowledge about contraceptive pills. Knowledge about permanent methods and intra-uterine devices was 15% (70) among both males and females. However, Knowledge about Coitus interrupts 25% (117) and tubal ligation 12% (56)

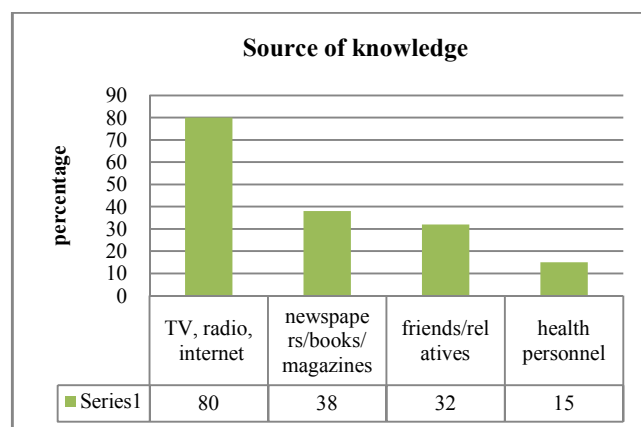
method of contraception were more in males as compared to female [graph 2].



Graph 2 knowledge of contraceptive methods

### Source of knowledge

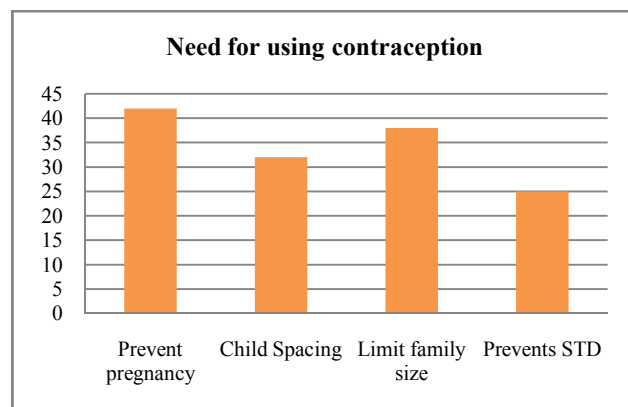
80% (374) had gained information about family planning and contraception from the TV /internet/ radio, 38% (177) from newspapers/books/magazines, 32% (149) from friends/relatives and 15% (70) from health personnel [graph 3].



Graph 3 Source of knowledge

### Need for Using Contraception

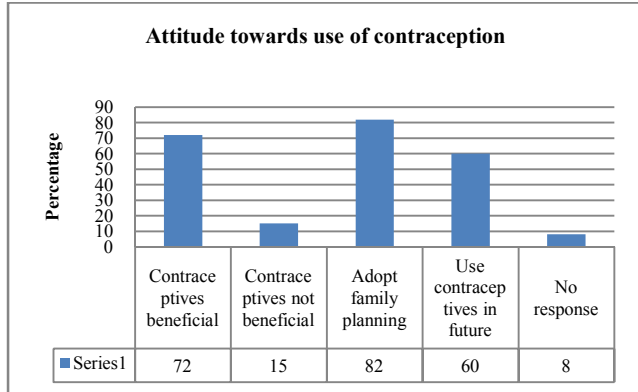
42 % (196) said that contraceptives are used to prevent unwanted pregnancy, 32 % (149) to space child birth, 38 % (177) to limit family size and 25% (117) to prevent sexually transmitted diseases [graph 4].



Graph 4 Need for using contraception

### Attitude Towards use of Contraception

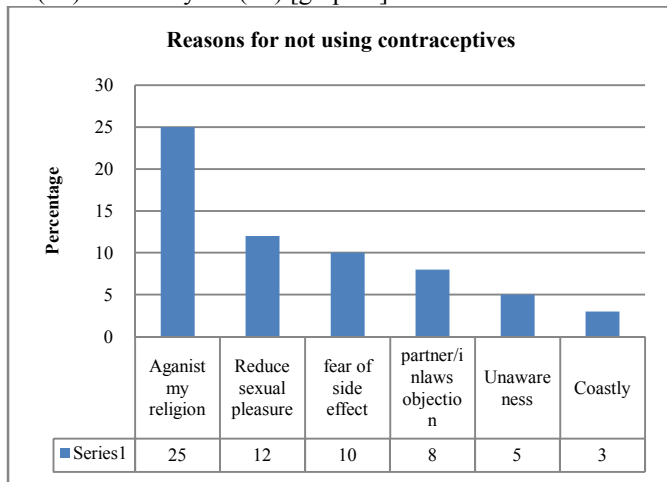
72% (336) of students thought that contraceptive use was beneficial, while 15% (70) does not think so. 82% (383) of students wanted to adopt family planning in their future but only 60% (280) were willing to use some contraceptive methods and 8% (37) students did not responded to the question regarding the use of contraceptive methods [graph 5].



Graph 5 Attitude towards use of contraception

### Reasons for not using Contraceptives

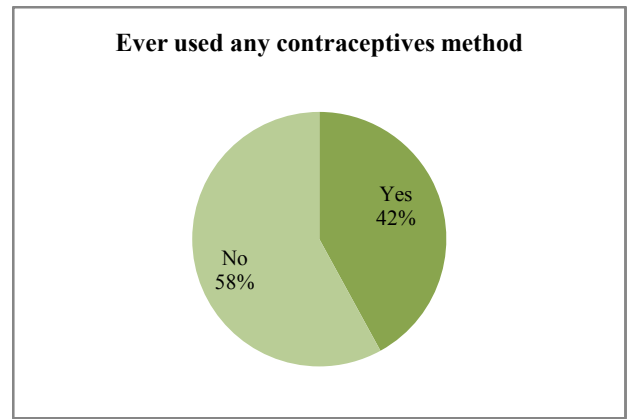
The most common reasons for not using contraceptives were it was against their religious beliefs to use a contraceptive 25% (117), reduces sexual pleasure 12% (56), fear of side effects 10% (46), partner / in-laws objection 8% (37), unawareness 5% (23) and costly 3% (14) [graph 6].



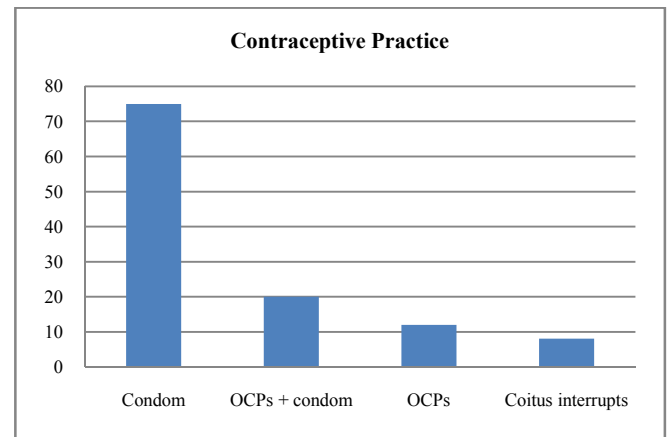
Graph 6 Reasons for not using contraceptives

### Contraceptive Practice

A total of 42% (196) respondents to the question of ever used any contraceptive method (pie chart 5). Among them the most commonly used contraceptive method was condoms 75%, followed by combined OC pills and condoms (20%), only OCPs 12% and coitus interrupts 8% [graph 7]. Most common reason for adopting them was because of its affordability, easily availability and least side effects.



Pie Chart 5 Ever used any contraceptives method



Graph 7 Contraceptive Practice

## DISCUSSION

Many studies have been conducted all over the world to study about the knowledge, attitude and practice of family planning and contraception. The result of the present study showed that 95% of them heard about the family planning and 82% heard about the contraceptives, these finding were similar to the study conducted in Sikkim by Renjhen P *et al.*<sup>13</sup> where 98% of the students had knowledge about family planning and 86% of them had heard about contraceptives. Nansseu JR *et al.*<sup>15</sup> conducted a study in Mbouda health district, Cameroon found that 96% heard about the family planning. Similar study conducted in North Gondar in 1995 by Fantahun MI *et al.*<sup>16</sup> showed the level of knowledge of contraception was 75%. Araoye *et al.*<sup>17</sup> conducted a study in Nigeria found that 97.7% of males and 98.4% females respectively knew at least one method of contraception. A study conducted in Delhi by Aggarwal O *et al.*<sup>18</sup> showed that knowledge regarding, contraception was 83.5%. The study conducted in Ludhiana by Benjamin *et al.*<sup>19</sup> shows that 87% were aware of contraception. The result of our study was in contrast to study conducted in Northwest Ethiopia by Semachew *et al.*<sup>20</sup> where only 42.3% of study participants had good knowledge of contraceptives.

The source of knowledge about contraception in our studies was mostly from television, radio and internet which was similar to study conducted by Renjhen P *et al.*<sup>13</sup> and in Punjab Pakistan by Nasir JA *et al.*<sup>21</sup> but our result was in contrast to study conducted by Aggarwal O *et al.*<sup>18</sup> and Nansseu JR *et al.*<sup>15</sup> where the major source of knowledge was from friends and health personnel respectively.

The most heard method of contraception in our study was condom followed by combination of OC pills which was similar to study conducted by Renjhen P *et al.*<sup>13</sup>, Fantahun MI *et al.*<sup>16</sup>, Araoye MO *et al.*<sup>17</sup>, Kanpurwala M A *et al.*<sup>22</sup> and Nasir JA *et al.*<sup>21</sup>. Our result was in contrast to study conducted by Tamire W *et al.*<sup>23</sup> in Ethiopia where the most preferred method was OC pills (43.9%).

Most common reasons for not using contraceptives in our study was against their religious beliefs, which was similar to study conducted by Renjhen P *et al.*<sup>13</sup> and Katama SK *et al.*<sup>24</sup> but it was in contrast to study conducted by Kanpurwala M A *et al.*<sup>22</sup> where the main reason was fear of side effects and desire of a male child. Another study in Nigeria by S J Etul *et al.*<sup>25</sup> states that reason for not using contraceptives was refusal by husband 54%, it causes infertility and ill health 35%, against their religion 28% and Semachew Kasa *et al.*<sup>20</sup> states reasons for not using contraceptives was desire to have a child (53.2%) and preferred method not available (46.8%).

Our study showed that 72% (336) of students thought that contraceptive use was beneficial and 82% (383) of students wanted to adopt family planning in their future which was similar to study conducted by Renjhen P *et al.*<sup>13</sup> where 71% of students thought that contraceptive use was beneficial, and 78% of students wanted to adopt family planning in the future. Another study conducted by Semachew Kasa *et al.*<sup>20</sup> where the majority (88.5%) of the respondents ever discussed on family planning issues with their partners and wants to use it in the future. S J Etuk *et al.*<sup>25</sup> states that 86% subjects believe that family planning is useful.

In our study only 60% students want to use some contraceptive methods which was similar to study conducted by Mustafa G *et al.*<sup>26</sup> where majority of subjects knew about some of the modern contraceptive methods, but the overall contraceptive use was very low. Highest awareness but low utilization of contraceptives making the situation a serious challenge.<sup>27,28</sup> The study done by Tilahun T *et al.*<sup>29</sup> in Jimma Zone, Ethiopia showed that good knowledge on contraceptives didn't match with the high contraceptive practice.

In our study only 42% respondents to the question of ever used any contraceptive method. Among them the most commonly used contraceptive method was condoms 75%, followed by combined OC pills and condoms (20%) which was similar to the study conducted by Renjhen P *et al.*<sup>13</sup> and Katama SK *et al.*<sup>24</sup>. Our result was in contrast to result of Semachew Kasa *et al.*<sup>20</sup> where (75.3%) of study participants ever used contraceptive methods and the main types were pills (7.4%) and injectable (77.2%).

## CONCLUSION

The result of the study revealed that students are aware about the family planning and contraception but the use of contraception was not satisfactory. So there is a need to motivate and educate the students for the use of contraceptives so that it can lead to arrest the unwanted pregnancy and increase in population. The television, radio and internet had played an important role in spreading the awareness among the college students regarding contraceptives use in Mirzapur district. This can be used furthermore for motivating the people

to adopt family planning and contraception. Educational and counseling sessions regarding family planning and contraception should be conducted on a mass level so that people can comfortably talk and discuss on such issues. Also primary health care providers' knowledge has to be continuously enhanced to deliver the right and sound advice about family planning and contraception. Further studies assessing the acceptance of contraceptive methods should be conducted so as to motivate the youth to adopt such methods.

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### Conflict of interest

None

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