CONCLUSIONS
AND
RECOMMENDATIONS
The present study, entitled "Seroprevalence of HIV/AIDS and study of immune system in high risk and low risk groups in the region of Bundelkhand in Uttar Pradesh," was carried out in department of Microbiology of M.L.B. Medical College, Jhansi. Following inferences have been drawn from this study.

6.1 CONCLUSIONS

- In high risk groups (HRGs), television (67.65%) was the main source of knowledge for HIV/AIDS. P.A.C. personnel (51.81%) were mainly dependent on newspapers. After the television, family members/friends (15.46%) and newspapers (11.12%), were main source of knowledge.

In low risk groups (LRGs), also, television (42%) was the main source of knowledge for HIV/AIDS. Paramedical staff (51%) were mainly dependent on books/magazines. After television, books and magazines (38%) and newspapers (11.33%) were the main source of knowledge.

- In high risk groups altogether, (68.24%) respondents were aware that AIDS occurs in India. Most of the participants among police (73.11%) and P.A.C. (90.36%), correctly reported its presence in India. While its presence was known to only 47.80% jail inmates and (42.85%) CSWs.

In low risk groups, over all 93% respondents were aware that AIDS occurs in India. Hundred percent teachers and paramedical were aware of occurrence of AIDS in India while, 21% students were unaware about this fact.
• In high risk groups, majority of respondents were aware that there is no vaccine available for prevention of HIV/AIDS. Only 15.61% were having incorrect information that there is vaccine for prevention of AIDS.

In low risk groups, also majority of respondents were aware that there is no vaccine available for prevention of HIV/AIDS. Only 14.33% were having incorrect information that there is vaccine for prevention of AIDS.

• In high risk groups, about one fourth (27.11%) respondents, incorrectly reported that AIDS is curable. More than half of the (52.09%) respondents were having correct information that AIDS is preventable and the knowledge was highest amongst police (87.31%) followed by P.A.C. personnel (75.90%).

It low risk groups, only 4.3% respondents, incorrectly reported that AIDS is curable, on the other side ninety three percent correctly knew about the preventability of AIDS.

• In high risk groups, about half (43.95%) of the respondents knew that condom can be used for prevention of AIDS and again knowledge was highest in police personnel (76.89%), followed by P.A.C. personnel (73.49%). Knowledge was lowest amongst CSWs (27.31%) due to lower educational status.

In low risk groups, eighty nine percent respondent knew that condom can be used for prevention of AIDS. Again hundred percent teachers
and paramedical staff correctly knew about this fact while only 67% students correctly knew about it.

- Amongst high risk groups, although, most of the respondents (73.27%) knew about, sexual transmission of HIV, infected blood, infected needles and perinatal routes were known to only 48.21%, 50.19% and 32.21% respondents respectively. Awareness about sexual routes was lower in CSWs (63.86%), jail inmates (64.39%) and in truck drivers (69.72%). Misconception regarding HIV transmission were higher in CSWs, jail-inmates, truck drivers.

In low risk groups, altogether 83% respondents knew about, sexual transmission of HIV and 81% respondents knew about its transmission through infected needle and blood transfusion. Awareness about perinatal routes were reported in 68.33% respondents. Awareness about all the four routes was lower in students (49%, 43%, 43% and 22% respectively). Misconception regarding HIV transmission were reported in students. Misconception regarding spread of AIDS through mosquito bite was reported in 3%, 2% and 4% students, teachers and paramedical staff.

- In high risk groups, about fifty percent respondents knew that AIDS is a major public health problem. The knowledge was, however, lower amongst jail-inmates (30.73%), CSWs (31.93%) and truck drivers (39.65%) possibly due to their lower literacy status.

In low risk groups, 93.33% respondents knew that HIV/AIDS is a major public health problem. Only 23% students responded incorrectly.
In high risk groups, regarding role of HIV testing before marriages, most of the respondents (54.91%) were in favour of this idea. Most of the police (82.18%) and P.A.C. personnel (95.18%) supported this idea, while most of the CSWs and jail-inmates were against the testing of HIV before marriage.

In low risk groups, regarding role of HIV testing before marriages, most of the respondents (79.33%) were in favour of this idea. Only 49% students responded in favour of the statement, while only 9% and 2% teachers and paramedical staff were against the above statement.

In high risk groups, about 50.96% responded were of view that every patient admitted to hospital should be investigated for HIV, while 15.38% were against of such testing. Most of the police (80.20%) and P.A.C. personnel (83.73%) supported this idea. Nearly one-third (33.66%) participants remained undecided on this matter.

Amongst low risk groups, 80% respondents were of view that every patient admitted to hospital should be investigated for HIV while 5% were against of such testing and 15% remained undecided on this matter. About 45% students remained undecided about the matter.

Amongst high risk groups, the respondents who were of view that every foreign tourist must be investigated for HIV/AIDS, were more than half (53.40%). Almost equal personnel from police and P.A.C. (93.07% and 93.37% respectively) were in favour of compulsory testing for every foreign tourist.

In low risk groups, 83.33% respondents were of view that every foreign
tourist must be investigated for HIV/AIDS. But only 55% students were in favour of the statement and 33% students were undecided on this matter while 5% were against the statement.

- Amongst high risk groups, nearly half (49.58%) of the respondents were in favour of introduction of sex education for school children. About one-fourth (27.72%) participants were against this view.

In low risk groups, about 68.33% respondents were in favour of introduction of sex education for school children. Maximum percentage of students (76%) and minimum percentage of teachers (58%) were in favour of the above matter.

- In high risk groups, respondents who were in favour of separation of AIDS patients from family were less than those who were against such separation (36.71% and 46% respectively). While 17.29% respondents were undecided on this matter.

Amongst low risk groups, 81.33% respondents were against the separation of AIDS patients from the family and only 12% were in favour of separation. Among students 32% respondent were in favour of separation.

- In high risk groups, it was matter of sorrow that more respondents (48.51%) were not ready to touch and care for AIDS patients. Such percentage was higher amongst truck drivers (60.76%), jail-inmates (60%) and CSWs (58.82%). Only 48.51% participants were in favour of touching and caring for AIDS patients.
Amongst low risk groups, 83% respondents were in favour of touch and care of an AIDS patient. Only 10.33% participants responded against the above statement, which included 26% students, 2% teachers and 1% paramedical staff.

- In high risk groups, majority of respondents (56.66%) were against, to have sex with stranger and 10.97% respondents had no problem in marking such sexual relation, while 32.37% participants were undecided on this issue.

In low risk groups, 89.33% respondents were against, to have sex with stranger and merely 1.33% respondents had no problem in making such sexual relation, while 9.34% participants were undecided on this issue.

- Amongst high risk groups, about two-third (64.58%) respondents reported that AIDS patient can work in factory/office, however, 19.04% participants were against of this idea.

In low risk groups, 76% respondents reported that AIDS patient can work in factory/office, and only 5.33% respondents were against this. Altogether, 18.67% respondents were undecided about the fact. Hundred percent teachers and paramedical staff were in favour of the statement.

- In high risk groups, on matter of divorce of spouse who had AIDS, majority (40.52%) were in favour of keeping their spouse along with them and only 37.24% respondents were in favour of divorce. Such percentage was higher among truck drivers (43.43%), jail-inmates (43.42%) and CSWs (42.86%).
Amongst low risk groups, 74% respondents reported against the matter of divorce of spouse who had AIDS and only 9.67% respondents were in favour of divorce and 16.33% were undecided about the matter. Such percentage was higher among students (44%).

- In high risk groups, the greater proportion (58.42%) of respondents of these five groups would feel ashamed if they had AIDS, while 26.96% respondents answered that person should not feel ashamed if he/she had AIDS.

In low risk groups, about 17% respondents would feel ashamed if they had AIDS, while 75.67 respondents answered that person should not feel ashamed if he/she had AIDS.

- In high risk group, about half (43.72%) of participants answered that a women should not be married if she is suffering from AIDS. If she is already married then she should not conceive, while 29.40% respondents were not in position to answer on this matter and 26.88% participants were in favour of marriage and child bearing.

In low risk groups, about three fourth (75.67%) of the participants answered that a women should not be married if she is suffering from AIDS. If she is already married then she should not conceive, while 17% respondents were in favour of the above matter and 7.33% respondents were undecided regarding it.

- In high risk groups, in total, 9.44% respondents had experienced oral sex. Practice of oral sex was found more in C.S.Ws (13.87%), followed
Amongst low risk groups over all 3.67% only experienced oral sex. Such percentage was reported only in paramedical staff (11.00%).

- In high risk groups, practice of anal sex was low, as only 16.15% respondents had experienced it. Respondents who practiced oral sex were comparatively more amongst C.S.Ws (29.83%) than jail-inmates (20.49%). It was again lowest amongst police personnel (6.93%).

In low risk groups, again only 3% respondents had experienced it, which was exclusively amongst paramedical staff.

- In high risk groups, nearly half of respondents (45.95%) accepted use of condom either sometimes or always. Condom usage was lower in C.S.Ws, truckers and jail-inmates.

Among low risk groups, only 79.27% respondents accepted use of condom sometimes or always. While 20.73% responded never used it.

- In high risk groups, only 3.43% respondents needed blood transfusion and majority of them (60%) received blood from their relatives. Only 4.44% of respondents, who got blood transfusion, received it from professional donors.

In low risk groups, only 11% respondents had undergone blood transfusion and majority of them (84.85%) received blood from their relative and rest 15.15% had received it from voluntary donors.
In high risk groups, only 9.22% respondents donated blood either once or more and majority of them nearly 87% donated blood to their relative. Remaining (13.22%) gave it to earn money.

In low risk groups, overall only 5% respondents donated blood once in their life and all of them had given it to their relatives.

- In high risk group, prevalence rate of HIV was highest among C.S.Ws (4.20%), truckers (4.18%), followed by jail-inmates (0.98%). There was none of HIV/AIDS amongst police and P.A.C. personnel.

In low risk group, no seropositivity for HIV/AIDS was reported.

- In high risk groups, prevalence rate was highest (2.91%) amongst youngsters (18-25 years). Most of the study subjects (3.46%) who were tested positive for HIV, were unmarried in comparison to married group (2.16%).

- In high risk groups, positivity was highest amongst just literates (5.41%), followed by participants who were moderately literate (3.08%).

- In high risk groups, prevalence of HIV amongst respondents who had sex with partners other than their spouse was relatively very high (4.23%) as compared to respondents who had no such partners.

- In high risk groups, prevalence of HIV was much higher amongst participants who had sexual intercourse with friends (39.39%) and commercial sex workers (33.33%) than those who had sex with others.
• Amongst those study subjects of high risk groups, which admitted that they had experienced anal sex, HIV positivity was higher (4.25%) while such percentage was relatively lower (2.18%), amongst those who denied for such type of sexual activity.

• In high risk groups, Among the thirty three HIV positive respondents, almost all of them reported about the problem of fever (recurrent or continuous) and diarrhoea from last one month. Few of them also reported the problem of oropharyngeal candidiasis and cough. These symptoms generally develop in first and second stage of HIV infection with their CD$_4^+$ count $\geq$ 500/cub. mm., and CD$_4^+$ count ranging between 200-500 cub. mm., respectively.

6.2 RECOMMENDATIONS

In the present study, results have been described and discussed in detail and conclusions drawn. On the basis of these results and conclusions, several measures can be suggested to control the rapid spread of AIDS menace. Some of the recommendations are as follows.

• As the main source of information for AIDS was television and newspaper, there is urgent need to develop good television programmes and literature on AIDS, so as to make people aware about correct facts.

• The reproductive health education should be part of curriculum in all schools. There should be classroom based educational programmes on STD/AIDS beginning from secondary classes and onwards and class teachers should be properly trained for educating the students effectively.

• The only socio-demographic variable which have a good effect on AIDS awareness and can be further improved, is literacy status.
Hence, Programmes should be devised and implemented to enhance the literacy status of the population.

- There should be posters and roadside bill boards and painting on walls carrying HIV/AIDS message, video shows at the congregation of people like exhibitions and fairs, should be organised to provide the knowledge and to create awareness about HIV/AIDS.

- Public awareness programmes should be directed towards all sections of society irrespective of income, education, occupation, creed and caste.

- Apart from government sectors, AIDS education should activate and co-ordinate the local health agencies, NGOs', media agencies and involve educational institutions, industries, offices, as well as community at large for an effective educational programme.

- National AIDS Control Programme should be strengthened further to prevent the transmission of AIDS through blood or unsterilized needles and to make the people aware about AIDS through I.E.C. (information, education, communication) campaigns.

- For developing countries, there are social and economical constraints with limited resources. Hence, community surveillance for HIV/AIDS is the best measure for planning the prevention and control strategy.

- Finally, as the results present study differ from other similar studies on some important aspects, such as low prevalence rate in jail inmates, zero prevalence rate amongst police and P.A.C. personnel’s, and low risk groups etc, it is suggested to conduct another indepth study in the same or similar area to confirm the findings of this study.