Knowledge Regarding HIV/AIDS among Nepalese Army
Roy RK\textsuperscript{1}, Roy DK\textsuperscript{2}, Ghimire S\textsuperscript{3}, Bist A\textsuperscript{3}, Maharaj A\textsuperscript{4}

ABSTRACT

Introduction: A global pandemic threat HIV/AIDS is also matter of concern of developing countries like Nepal where the first case was identified in July 1988 and later became epidemic and then concentrated epidemic among risk group for HIV. Several studies reflected HIV is associated to many factors, Literacy and Socio-economic conditions being at the highest rank. Members of Nepal army are generally with less educational background and few with higher educational status are at higher post. Thus knowledge regarding HIV/AIDS among this group need to be assessed.

Aims: The overall objective of our study was to assess knowledge regarding HIV/AIDS among Nepal army in Banke district.

Methods: A Cross-sectional descriptive study with population size of 146 Army was performed which covered the entire population of Shree Shreemehar Army Camp in Banke, starting from 18\textsuperscript{th} June to 27\textsuperscript{th} August, 2018. A pre-tested questionnaire containing structural, semi-structural and open ended questions were made as data collection tool. All the soldiers in Army camp were interviewed after receiving consent as an ethical clearance.

Results: All 146 Army of our study were aware about HIV/AIDS mainly via mass media (83.56%). 33 respondents still didn’t know about availability of its treatment. Misconception about its complete cure and vaccination was seen in 12 and 39 respondents respectively. 58 respondents were found knowing about the free health services by government. 141 respondents knew certain things about prevention. 28 respondents admitted of having multiple sex partners and only 24 among them used preventive measure.

Conclusion: Though all the respondents of our study had known about HIV/AIDS still they had misconception regarding its treatment and prevention. Many respondents do not even know about the free health services of government. Few of them still don’t use preventive measure.

Keywords: HIV/AIDS, Nepal Army, Knowledge, Prevention, Misconception

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INTRODUCTION

Since the first case in United States in 1981, AIDS has spread throughout the world turning it a global pandemic. AIDS is a condition in which progression allows life-threatening opportunistic infections. An estimated 36.7 million people worldwide were living with HIV/AIDS at the end of 2016, And one million people died from AIDs-related illnesses in 2016,bringing the total number of deaths from AIDS-related illnesseseto 35.0 million. Nepal started its policy response to the epidemic of HIV in 1995. The prevalence of HIV/AIDS in Nepal among adult population is estimated to be 0.23 which is considered “generalized and severe.” By 2020, as of Government Policy, 90% of all people with diagnosed HIV infection will receive sustained antiretroviral therapy, and 90% of all people receiving antiretroviral therapy will have viral suppression.\textsuperscript{1,16} More than four in every five new infections are transmitted through sexual transmission in Nepal. Drugs abusers, MSM, and female sex workers are at higher risk in Nepal. Labour migrants, and clients of female sex workers transfer infections from high to low risk population. As the selection of Army in our country is not based on higher education qualification, most of them are school drop outs and very few educated are at higher posts. Army are trained for long time period away from their family, As a result they are indulge in high sexual activities for pleasure to get relieved of related training stress.\textsuperscript{16} This study is focused on assessing knowledge regarding HIV/AIDS among Nepal Army
METHODS

This study was conducted based on descriptive cross sectional study design, data was collected only once and there was no follow up done. This study was basically focused on assessing the knowledge regarding HIV/AIDS among Army youths in Shree Shreemehar Army Camp, Banke district. Army were interviewed using questionnaire having structured and semi-structured also open ended questions. All the Army residing in the camp were interviewed. Collected primary data were later tabulated and analyzed using cross tabulation and descriptive calculations. Study was started in 18th June 2018. Validity and reliability of questionnaire were checked by interviewing 30% of real study population. Nepali language was used in the questionnaire for better response. All the collected information was assessed using MS-EXCEL and SPSS version 22 for descriptive analysis. Informed consent was taken from each Army youth. Analyzed data were thus presented in the form of tables and charts and interpreted accordingly.

RESULTS

All 146 respondents of our study have heard about HIV/AIDS.

Table I: source of information regarding HIV/AIDS

<table>
<thead>
<tr>
<th>Media</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>T.V/Radio</td>
<td>122</td>
<td>83.56%</td>
</tr>
<tr>
<td>Family/Friends</td>
<td>59</td>
<td>40.41%</td>
</tr>
<tr>
<td>Newspaper/Books</td>
<td>99</td>
<td>67.80%</td>
</tr>
<tr>
<td>Community Field Programme</td>
<td>82</td>
<td>56.16%</td>
</tr>
<tr>
<td>Others</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

Table above shows that highest number of respondents i.e. 122(83.56%) have heard about HIV/AIDS via T.V/Radio.

Table II: Knowledge regarding HIV/AIDS

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is a life threatening disease</td>
<td>60</td>
<td>41.09%</td>
</tr>
<tr>
<td>Communicable disease</td>
<td>89</td>
<td>60.95%</td>
</tr>
<tr>
<td>Sexually Transmitted Disease</td>
<td>118</td>
<td>80.82%</td>
</tr>
<tr>
<td>Bad character disease</td>
<td>11</td>
<td>7.5%</td>
</tr>
<tr>
<td>Not curable disease</td>
<td>37</td>
<td>25.34%</td>
</tr>
<tr>
<td>Disease of Sex workers</td>
<td>08</td>
<td>5.4%</td>
</tr>
<tr>
<td>Disease of drug abusers</td>
<td>05</td>
<td>3.4%</td>
</tr>
<tr>
<td>Brought by Foreign Workers</td>
<td>10</td>
<td>6.8%</td>
</tr>
<tr>
<td>Bombay disease</td>
<td>04</td>
<td>2.7%</td>
</tr>
<tr>
<td>Others</td>
<td>04</td>
<td>2.7%</td>
</tr>
</tbody>
</table>

Table above shows that out of 146 respondents, highest number of respondents i.e. 118(80.82%) know that HIV/AIDS is a sexually transmitted disease.

Table III: Knowledge about Mode of Transmission

<table>
<thead>
<tr>
<th>Source of transmission</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Touching</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Handshaking</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Eating Together</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Unsafe sexual contact</td>
<td>123</td>
<td>84.24%</td>
</tr>
<tr>
<td>Sharing Syringe</td>
<td>85</td>
<td>58.21%</td>
</tr>
<tr>
<td>Sharing of clothes &amp; utensils</td>
<td>05</td>
<td>3.4%</td>
</tr>
<tr>
<td>Sleeping together</td>
<td>04</td>
<td>2.7%</td>
</tr>
<tr>
<td>Kissing</td>
<td>16</td>
<td>10.95%</td>
</tr>
<tr>
<td>Mosquito bite</td>
<td>05</td>
<td>3.42%</td>
</tr>
<tr>
<td>Vertical transmission</td>
<td>60</td>
<td>41.09%</td>
</tr>
<tr>
<td>Multiple sexual partners</td>
<td>22</td>
<td>15.06%</td>
</tr>
<tr>
<td>Others</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

Table III: Availability of Treatment

Table above shows that out of 146 respondents, highest number of respondents i.e.123 (84.24%) think that HIV/AIDS transmits by unsafe sexual contact.

Figure 1: Possibility of Treatment

Pie Chart above shows that out of 146 respondents, 113 (77.39%) believe that the treatment is possible for HIV/AIDS while remaining 33(22.60%) do not believe so.
Table above shows that out of 113 respondents, highest number of respondents i.e. 63(55.75%) believe that its treatment is available at Multi-facilitated tertiary and expensive hospitals.

Information about Free Government Health Service for HIV/AIDS

Out of 146 respondents, 58(39.72%) know that Government of Nepal provides free services for this disease while remaining 88(60.27%) do not know about it. Out of 58 informed respondents, 30(51.72%) responded that Government of Nepal provides free health services for HIV/AIDS in District Level hospitals. 141(96.57%) out of 146 responded that HIV/AIDS can be prevented while 5(3.42%) were unknown about the preventive measures.

Preventive Measures

<table>
<thead>
<tr>
<th>Preventive Measures</th>
<th>Numbers</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safe Sexual Contact</td>
<td>133</td>
<td>94.32%</td>
</tr>
<tr>
<td>Safe blood transfusion</td>
<td>97</td>
<td>68.73%</td>
</tr>
<tr>
<td>Using Disposable syringes</td>
<td>80</td>
<td>56.73%</td>
</tr>
<tr>
<td>Isolation of person suffering from disease</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Boycotting the person from society</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Eating Separately</td>
<td>08</td>
<td>5.60%</td>
</tr>
<tr>
<td>Sleeping Separately</td>
<td>05</td>
<td>3.50%</td>
</tr>
<tr>
<td>Others</td>
<td>01</td>
<td>0.7%</td>
</tr>
</tbody>
</table>

Table IV: Preventive Measures

Table above shows that out of 141 respondents, highest number of respondent i.e. 133 (94.32%) were well known that HIV/AIDS can be by prevented by Safe Sexual Contact. However 08(5.60%) said that the infected persons should eat separately.

Information about PMTCT

Out of 146 respondents, 56(38.35%) had known about Prevention of Mother to Child Transmission (PMTCT) while 90(61.64%) had no idea about it.

Knowledge regarding treatment possibility and vaccination

Out of 141 respondents, 12(8.21%) said that HIV/AIDS could be treated while rest 134(91.78%) were unknown about its treatment. Also 39(26.71%) had misconception that vaccine is available for HIV/AIDS while 107(73.28%) agreed that vaccination is not available.

Attainment in trainings

Only 40(27.39%) respondents had taken training/health education class related to HIV/AIDS via sources such as: School teachers, Health Posts, District Health Office (DHO) etc.

Sexual behaviour

Out of 146 respondents, 28(19.17%) admitted that they had sex with multiple partners while rest 118(80.82%) did not admit so.

Prevention from HIV/AIDS and STDs

24(85.71%) out of 28 respondents practicing multiple sex were adopting preventive measures of STDs while 04(14.28%) were not. Condom was found to be the only preventive measure used by all.

DISCUSSION

All of the 146 respondents of our study have heard about HIV/AIDS while a similar kind of research conducted by Mr. Chetan Nidhi Wagle, NHRC, 2009 among 251 policemen of KathmanduMetropolitan showed the average of 73% only had knowledge of HIV. There was another research on “knowledge of HIV/AIDS among adolescence at intellectual academy in kumarighat-7, Tushal, kathmandu, Nepal” by Mrs. Gayatri Rana which showed that only 66% of adolescence had knowledge that HIV/AIDS is communicable disease. Also a research conducted by Dr. Shikha Trivedi reported that 88.3% of students had heard about HIV/AIDS. Highest number of respondents i.e. 122(83.56%) have heard about HIV/AIDS via TV/Radio in our research. And for a similar type of research conducted by Mr. Chetan Nidhi Wagle, NHRC, 2009 on “knowledge on HIV & AIDS and sexual behaviours among the Nepal police of Kathmandu metropolitan, Nepal” showed Radio/TV was the major source for only 59% individuals. Our study reflected that 118(80.82%) respondents knew that HIV/AIDS is a sexually transmitted disease among which 84.24% people had knowledge of transmission via unsafe sex, 58.21% had idea regarding transmission by contaminated blood and 41.09% knew about vertical transmission. While a research by Mr. Tulsi Ram Bhandari showed more than two-third respondents had knowledge on transmission, from which the highest (85%) had responded “unsafe sex”, 72% through “contaminated blood”, 67% via “verticaltransmission” and remaining 27% were unaware. On the other hand another research done by M Bharati, L Bharati reported 94.7% individual knew HIV transmits via needle sharing. Also a research by G Rana on adolescents reflected that 90% of HIV transmission is due to unprotected sexual contacts. Our research reflected, 113(77.39%) of the respondents know that the treatment is possible for HIV/AIDS. While another research by Sandeep Sachdeva, Jagbir S. Malik, Ruchi Sachdeva, Tilak R. in Nigeria and Delhi showed proportion of respondents who were aware about existence of anti-retroviral drugs for HIV/AIDS were 52.60% and 28.6% respectively. In another research by N Pandey, majority (37%) of respondents said that the drug for the treatment of HIV/AIDS is not available, (31.5%) said there is availability of drug and (31.5%) did not know about the drug. In this study, 113 responded that the treatment of HIV/AIDS is available, of which 63 responded treatment to be limited in Multi-facilitated tertiary and expensive hospitals. 58 i.e. 39.72% respondents knew Government of Nepal provides free health services for
HIV/AIDS. Dr. Khem Bahadur Karki on an interview under the topic - HIV/AIDS, declining in Nepal taken by Pratik Rimal which was published in My Republica, 1st December 2017; said that “The government is focused on curative measures, but a lot more needs to be done on preventive measures in order to change behaviours. The government is well able to fund to provide free treatment. We just need proper planning.” 9,16

141(96.57%) out of 146 individuals in our study responded that HIV/AIDS can be prevented. Only 24(85.71%) of 28 respondents having multiple sex partners, were adopting condom only as preventive measures for HIV and STDS. On a research by POLICY Project Nigeria, approximately 12% of the respondents knew of no ways to prevent HIV/AIDS. Some of the commonly cited modes of prevention of HIV included use of condoms (72.7%), fidelity (59.7%), and not receiving injections with shared or re-used needles (38.6%). Abstinence was mentioned by only slightly more than 10% of all respondents. Some of the misconceptions or incorrect responses included prevention by not kissing (10.3%).10 Another research conducted by Awasthi KR, Adefemi K, Tamrakar M reported that unprotected sex is practiced by more than 70% of the truck drivers with studies showing that more than two thirds of the drivers have had experiences of having sex with a sex worker, at least once, during the course of their travels.11 133(94.32%) respondents in our study were well known that HIV/AIDS can be by prevented only by Safe Sexual Contact. However only 08(5.6%) said that the infected persons should not eat together with others. The HIV prevention methods were reported to be condom use, no sexual contact, self-control, avoid sex workers and multiple sex partners as per the research conducted by Karoline Moon Department of Health Policy and Administration.12 Further another comparative research was done by Elna van der Ryst et al showed high percentage of respondents i.e. 57.1% mentioning that people living with AIDS should not have right to normal sex lives.13 56(38.35%) respondents had known about Prevention of Mother to Child Transmission (PMTCT) in our study. Similar study by Dr. Shikha Trivedi shows only 23.4% cited mother to baby as routes of transmission of HIV.4 8.21% out of 146 respondents said that HIV/AIDS could be treated completely while 91.78% were unknown about its treatment. Also, 39(26.71%) had misconception that vaccine is available for HIV/AIDS while 107(73.28%) agreed that vaccination is not available. A research conducted by Jaiswal S, Magar BS et al reflected that 46.2% of total respondents knew that vaccine is yet not available for HIV/AIDS while 53.8% said that there is cure and vaccine for AIDS respectively.14 Out of 146 respondents, 28(19.17%) admitted that they had sex with multiple partners while rest 118(80.82%) did not admit so. In a similar research by Karna Bahadur Oli and Mahendra Maharjan on their research reflected that about 16% of the participants had expressed their practice of sexual relationship outside more than once, which signifies vulnerability to HIV infection.15,16

LIMITATIONS
Assessment of Knowledge regarding HIV- AIDS among Army group, in this study came up with certain limitations as well, such as; the sample were taken from only one army camp located in Sumsergunj, also it would reflect better generalization if the sample size would be more large. Also, all the factors and determinants are not assessed in this study. Better correlation could have been formed (Correlation Coefficient has not been used) between several factors and the knowledge level among Army people. Besides, physical limitations related to fundings and infrastructural support may have definitely enhanced the study.

CONCLUSION
Out of 146 respondents in our study, all have heard about HIV/AIDS of which 83.56% have heard via TV/Radio and among them, 80.82% know that it is a Sexually Transmitted Disease. Along that 84.24% responded that this disease is transmitted via unsafe sexual contact and only 113(77.39%) of 146 respondents knew that treatment of this disease is possible and among them, 55.75% knew that the treatment of HIV is available only in multi-facilitated tertiary and expensive hospitals. Out of 146 individuals, only 39.72% knew that Government of Nepal provides free health services and among them only 51.72% responded the free services are available only in District level hospitals. Regarding prevention, 94.32% knew that prevention of HIV is possible by safe sexual behavior, also 38.35% knew about Prevention of Mother to Child Transmission. 73.28% of the total respondent was aware regarding absence of any vaccinations for HIV. Only 27.39% have taken any formal trainings/health educational classes regarding HIV. Besides knowledge, only 28 individuals accepted having multiple sex partners. Among them, 24 admitted using preventives measures and condom was found to be the only preventive measure used by all for prevention of HIV, AIDS, and STIs.

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