



ORIGINAL RESEARCH ARTICLE

PREVALENCE OF SEXUAL HARASSMENT IN PUBLIC TRANSPORTATION AMONG FEMALE STUDENTS
OF A PUBLIC COLLEGE AT BHARATPUR, NEPAL

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ABSTRACT

Background: Sexual harassment in public transportation has been recognized as a worldwide serious problem, particularly among women. However, the exact figure of the sexual harassment in transit places is still unknown. Therefore, this study aims to identify the prevalence of sexual harassment in public transportation among the female students of a public college at Bharatpur.

Methods: A descriptive cross-sectional study consisted of 196 female students who studied in the 12th standard of various academic streams of Saptagandaki Multiple Campus of Bharatpur. Stratified proportionate random sampling technique was used for selection of the desired sample. Structured questionnaire was used and data was collected from 2076/03/15 B.S to 2076/03/27 B.S through web-based survey. Data analysis was performed in SPSS version 20 for window using descriptive statistics.

Results: Majority, i.e. 82.1% of the respondents experienced sexual harassment in public transportation of which 85.1% experienced verbal harassment followed by physical harassment (80.1%) and non-verbal harassment (70.8%). Male passengers were the main perpetrators involved in physical (82.8%), verbal (75.2%) and non-verbal harassment (81.6%). Furthermore, the study revealed that the highest (96.3%) of the participants did not file the complaint because of fear.

Conclusions: Sexual harassment in public transportation was found to be significantly higher in female students. Therefore, government and concerned authorities need to adopt zero tolerance rules, regulation and policies towards any form of sexual harassment in public spaces.



INTRODUCTION

Sexual harassment among women is a serious, worldwide problem^{1,2} which includes violation of personal space by individual or groups of men from mild transgression and annoyances to serious abuse.³⁻⁵ Many women and teenagers using public transport often face different forms of sexual harassment from molesters.^{6,7} While using public transportation, it was found that 80% of girls and women from the ages of 12–35 years have faced different forms of sexual harassment in public transportation.⁸ Likewise, In Nepal, a flash survey showed that 86% of girls above 16 years of age suffered from sexual harassment in which 40% experienced physical harassment while travelling in public transport.⁷ Nowadays, the use of public transport has become common among women mainly for the purpose of education and work. Despite the high rate of harassment, it remains as a silent issue in society due to the social, cultural, and even political factors negatively affecting the travel decisions.⁹⁻¹¹ In addition, the male dominant society and mindset has led women to feel embarrassed to make police complaint about the harassment they experience in day-to-day life.¹²⁻¹⁵ However, there is still

a dearth of information regarding prevalence of sexual harassment in Nepal. Hence, this study aimed at assessing the prevalence of sexual harassment in public transportation among female students of a public college in Bharatpur, Nepal.

METHODS

A cross-sectional study was carried out in Saptagandaki Multiple Campus Bharatpur, Chitwan which is situated in Province number-3. The population of the study were all those female students enrolled in the 12th standard of different faculties of science, management, education and humanities of Saptagandaki Multiple Campus. Stratified proportionate random sampling technique was used for selection of desired sample. The total target population was divided into four strata according to their academic streams and then the required number of female students from each stratum was chosen by the random table method. Sample size was calculated as described below:

Required sample for the study was calculated by using the formula given by Cochran,¹⁹⁹⁷,

For finite population, where N = 318

Formula: $n = N / (1 + Ne^2)$

Where,

n= the sample size

N=the size of population

e= the error of 5% points

$n = N / (1 + Ne^2)$

n=178

Sample size is 178.

Non- response error 10% of 178.

$10/100 * 178 = 17.8 = 18$

Where, $178 + 18 = 196$, now sample size is 196

Science students= $8/318 * 196 = 4.9 = 5$

Management students = $95/318 * 196 = 58 = 59$

Education students = $134/318 * 196 = 82.5 = 82$

Humanities students= $81/318 * 196 = 49.9 = 50$

Calculated sample size was 196.

Ethical approval was obtained from Chitwan Medical College Institutional Review Committee (Ref.no-CMC-IRC/076/077-094) and data collection permission was obtained from the school authorities. Written informed consent was obtained from each respondent prior to data collection. The objective and purpose of the research was clearly explained to the respondents prior to data collection. The dignity of the respondents was maintained by giving the right to reject or discontinue from the research study at any time.

A structured self-administered questionnaire was developed based on prior literatures and consultations with experts in the field of nursing education. It consisted of three domains: socio-demographic characteristics, experience of sexual harassment and experience on types of sexual harassment. To verify the reliability of the instrument, pretesting of instruments was done among 20 (10% of total sample size) female students of Narayani English Public Secondary School and these respondents were not included in the study. All the responses were measured from 2076/ 03/15 B.S to 2076/03/27 B.S and each respondent was given 25-30 minutes to fill up the questionnaire.

The data was exported to Microsoft Excel 2016 and was analyzed using IBM SPSS (Statistical Package for Social Sciences) version 20 for window. The collected data was checked, reviewed and organized for accuracy, completeness and consistency. The organized data was analyzed and interpreted by using descriptive analysis (frequency, mean, standard deviation, percentage) and the data was presented in the tables.

RESULTS

Out of 196 respondents, more than half of the respondents (62.8%) belonged to age ≤ 17 years. Almost all (96.4%), belonged to Hindu religion and 99% were unmarried. Majority of the respondent (41.8%) were studying in education stream. More than three quarter (81.1%) of participants lived inside Bharatpur. Majority (96.9%) of the respondents' father were literate and 88.8% of respondents' mother was literate. Nearly

half (43.4%) of respondents' father and (47.4%) respondents' mother were involved in agriculture. The entire respondent used public vehicle, where (47.4%) used on regular basis and larger fraction of the respondents (71.4%) spent less than one hour per day in public transportation. More than half (69.4%) used microbus as the common means of transportation (Table 1).

Table 1: Respondent's socio-demographic characteristics

n= 196

Variable	Frequency (%)
Age (completed in years)	
≤ 17 years	123(62.8)
> 17 years	73(37.2)
<i>Median = 17, IQR= Q3- Q1= 18-17</i>	
Religion	
Hindu	189(96.4)
Non- Hindu	7(3.6)
Marital status	
Married	2(1)
Unmarried	194(99)
Academic Stream	
Science	5(2.5)
Management	59(30.2)
Education	82(41.8)
Humanities	50(25.5)
Residence	
Inside Bharatpur	159(81.1)
Outside Bharatpur	37(18.9)
Father's educational status	
Literate	6(3.1)
Illiterate	190(96.9)
Mother's educational status	
Literate	22(11.2)
Illiterate	174(88.8)
Father's occupation	
Agriculture	85(43.4)
Business	55(28.1)
Service	42(21.4)
Others	14(7.1)
Mother's occupation	
Home maker	71(36.2)
Business	22(11.2)
Service	10(5.2)
Agriculture	93(47.4)
Use of public vehicle	
Yes	196(100)
No	0(0)
Frequency of using public vehicle	
Regular (5-7 days in a week)	93(47.4)
Often (1-4 days in a week)	56(28.6)
Sometimes (2-4 times in a month)	47(24)
Time spent in public vehicle	
<one hour	140(71.4)
\geq one hour	56(28.6)
Type of public vehicle used *	
Bus	126(64.3)
Micro bus	136(69.4)
Auto rickshaw	118(60.3)

Sources of Information about sexual harassment*	
Newspaper	75(38.3)
Television	125(63.8)
Friends and family	94(48)
Awareness program	41(20.9)

*= multiple response

In this study, most of the respondents (82.1%) were found to be having experience of sexual harassment in public transportation, of which maximum were exposed to verbal harassment followed by physical and non-verbal harassments as shown in Table 2.

Table 2: Respondents' experience of sexual harassment in public transportation n=196

Variable	Frequency (%)
Experience of sexual harassment	
Yes	161(82.1)
No	35(17.9)
Experience of different type of harassment (n= 161) *	
Experience of physical harassment	129(80.1)
Experience of verbal harassment	137(85.1)
Experience of non- verbal harassment	114(70.8)

Among the respondents exposed to physical harassment, activities such as standing close (60.2%) and touching personal clothes, hair, body part (53.9%) of the victims were commonly done by the harassers. Different activities done by the harassers in other two types of harassment including the frequency of harassment, nature of harasser, place and timing of these harassments are further presented here in Table 3.

Table 3: Respondents' experience on types of harassment

Variable	Frequency(%)
Type of physical harassment *(n=129)	
Patting	29(22.7)
Pinching	19(14.8)
Hanging around	19(14.8)
Standing close	77(60.2)
Touching personal clothes, hair, body part	69(53.9)
Hugging	7(5.5)
Frequency of physical harassment in last 3 month	
1-2 times	106(82.2)
3-4 times	19(14.7)
More than 4 times	4(3.1)
Identification of harasser *	
Driver	17(13.3)
Male passenger	106(82.8)
Conductor	31(24.2)
Female passenger	4(3.1)
Place of physical harassment	
At the bus stop	27(21)
Inside the public vehicle	95(73.6)
Both	7(5.4)
Estimated age of harasser	
15-25 years	65(50.4)
25-35 years	42(32.5)

35-45 years	22(17.1)
Time of physical harassment *	
Morning	14(10.9)
Day	101(78.3)
Evening	13(10.1)
Night	1(0.8)
Type of Verbal Harassment(n=137)	
Whistling	76(55.5)
Making cat call	39(28.5)
Sexual comments on clothes and body	46(33.6)
Telling sexual jokes and stories	17(12.4)
Frequency of verbal harassment in last 3 month	
1-2 times	117(85.4)
3-4 times	17(12.4)
More than 4 times	3(2.2)
Identification of harasser *	
Driver	21(15.3)
Male passenger	103(75.2)
Conductor	51(37.2)
Female passenger	5(3.6)
Place of verbal harassment	
At the bus stop	37(27)
Inside the public vehicle	90(65.7)
Both	10(7.3)
Estimated age of harasser	
15-25 years	89(65)
25-35 years	42(30.6)
35-45 years	6(4.4)
Time of verbal harassment *	
Morning	16(11.7)
Day	98(71.5)
Evening	20(14.6)
Night	3(2.2)
Experience of Non- Verbal Harassment(n=114)	
Winking	75(66.4)
Nodding	48(42.5)
Gesturing with leg or private part	15(12.4)
Frequency of harassment in last 3 month	
1-2 times	46(40.4)
3-4 times	55(48.2)
More than 4 times	13(11.4)
Identification of harasser *	
Driver	20(17.5)
Male passenger	93(81.6)
Conductor	35(30.7)
Female passenger	0(0)
Place of harassment	
At the bus stop	33(28.9)
Inside the public vehicle	72(63.2)
Both	9(7.9)
Estimated age of harasser	
15-25 years	46(40.4)
25-35 years	55(48.2)
35-45 years	13(11.4)
Time of non- verbal harassment *	
Morning	8(7)
Day	83(72.7)
Evening	18(15.8)
Night	5(3.1)

*= Multiple response

Half of the respondents (50%) experienced different forms of sexual harassment while they were wearing college dress. More than half (57.8%) of the respondents were found silent towards the harassment they faced and almost all (96.3%) of them expressed their unwillingness towards filing a complaint to police due to their perceived reasons as shown in Table 4.

Table 4: Respondents' action on experiencing sexual harassment n=161

Variables	Frequency (%)
Outfits while experiencing sexual harassment *	
College dress	80(50)
Kurta/ Tops	17(10.6)
Pant / Tshirt	83(51.9)
Skirt / Tshirt	22(13.8)
Usual reaction on sexual harassment	
Scolding the harasser	46(28.6)
Keeping silence	93(57.8)
Counteract / punishing /beating the harasser	7(4.3)
Ask for help	13(8.1)
Crying	2(1.2)
Filing a complaint (police)	
Yes	6(3.7)
No	155(96.3)
Reason for no complaint	
Being scared	43(26.7)
Don't want to make a big issue	23(14.4)
It is not a big problem	19(11.8)
Feeling of being shamed	30(18.6)
No response	41(25.5)

*= Multiple response

DISCUSSION

Sexual harassment of women in public spaces is an issue receiving greater attention from the media, academia, and the general public. Incidents of harassment against women on public vehicles continue to make headlines across the globe. However, the major concern is nevertheless remarkably limited knowledge of how to address it and the fact that many such incidents of harassment against women in public space prompts additional unanswered questions in Nepal. Therefore, it is important to consider the experience and types of sexual harassment while travelling in public transportation. Hence, this study aims to identify the prevalence of sexual harassment in public transportation among female students of public college at Bharatpur, Chitwan. Our finding indicated that 82.1% of female students had experienced sexual harassment while using public transportation which is consistent with the study conducted in Kathmandu, Nepal which showed the prevalence of 78.21%¹⁶ while another study done in Kathmandu, Nepal reported that 79.6% female students have faced sexual harassment in public transportation.¹⁷ On the contrary a study conducted in Bharatpur Chitwan reported that (50.47%) had witnessed sexual harassment in public transport and only 21.9 % of the respondents admitted that they themselves had been sexually harassed.¹⁸ Furthermore, Valan M (2020) reported

that 35 % of all young women have been harassed in one of the forms of sexual harassment in the last six months.¹⁹ Similarly, a survey in Pakistan reported that 69 % of students felt harassed more than once while travelling by public transport.²⁰ The findings might be attributed to the fact that Pakistan's Women Protection Act doesn't safeguard women on roads and buses, and applies only to workplaces.²¹ These findings of the study possibly indicate that incidents of sexual harassment are underreported and the magnitude is much larger than the evidences. Therefore, there might be the high chance of physical and psychological consequences of sexual harassment. Information must be provided about the potential problems and authorities must be encouraged to strengthen the rules, regulation and policies to combat the above problems.

We found that the prevalence of sexual harassment more among girls aged 17 and below in Chitwan, Nepal, among which verbal harassment was 85.1% followed by physical (80.15) and non- verbal (70.8%) harassment, where majority of the students' experienced harassments, such as whistling, sexual comments on the clothes and body, standing close, touching hairs and body parts. Similarly, a study conducted in Nepal reported that majority (42.37%) experienced physical harassment followed by (14.40%) verbal, (43.22%) nonverbal harassment where majority of respondents have an experience of unexpected touching of the breast, brushing of thighs and bottoms, pinching of the bottoms, and pinching of the hips.¹⁶ Likewise, another study conducted in Nepal revealed that more than half (67.1%) of the respondents experienced physical harassment followed by verbal (61.2%) and non-verbal (34.6%) .¹⁷ A pilot report conducted in Karachi , Pakistan revealed that majority of the respondents experienced staring/ leering, sexual comments, obscene gesture, men blocking the way , making animal and kissing noises.²⁰ Furthermore, a study in India revealed that around 35% of all young women have been harassed in one of the forms mentioned above in the last six month of the study, where majority of the respondents accounted for inappropriate touching, stalking, being asked for sexual favours, inappropriate comments on attires, inappropriate touching and stalking. ¹⁹

The reason behind all these forms of harassment might be due to unstable governments and related issues regarding proper implementation of laws. In addition, higher rates of harassment might be due to the differing cultural and gender norms, where public space is regarded as a male domain.

On the other hand, the present study also revealed that fellow male passengers were the main perpetrators involved in all the forms of harassment like physical, verbal and non-verbal harassment. These findings are also well documented in other literatures, showing that male fellow passengers were the main perpetrators involved in the harassment in public transportation.^{16,17,22} The reason might be attributed to the fact that males consider themselves superior socially, culturally, and physically, while females are considered to have less power compared to men.

These findings indicate the need for strategic programs on preventing sexual harassment and managing the negative impacts on females in public transportation. Additionally, our study presented that day hours were more common for all the forms of harassment and the findings were also mentioned in the study where morning and evening were the most common time for harassment.^{16, 23, 24} It is possibly due to the peak vehicle use hours and overcrowded vehicles which might give the perpetrator, ample opportunity for the harassment.

Subsequently, our study also found out that 96.3% did not file the police complaint, more than half (57.8%) of the respondents kept silent, and the reason for not complaining was because of fear. These findings are comparatively higher than in the previous study conducted in Nepal which found that only 2.07% made police complaint and the reason for not complaining was that they did not feel it is important enough¹⁷. These findings in our study are comparatively lower than the findings in the study in India where 24% made police complaint against the harasser.²⁵

This research adds value to the existing literature, through detailed analysis of students' experience towards sexual harassment in public transportation. It also provides some important practical insights into the development of strict rules and laws to decrease the incidence of trauma among the females travelling via public transportation in developing countries such as Nepal.

The present study has limitations. First, it was limited in scope; it should be noted that the cross-sectional design without experimental manipulation does not allow for causal conclusions. Most participants were from Chitwan district, limiting the generalization of our findings to other affected regions. Second, a cross-sectional design was applied and longitudinal approach could have helped verifying whether the adapted overload develops with increasingly arduous situation. Third, screening, characteristics of sexual harassment and the response towards the harassment were only based on self-reported perceived responses mentioned in the filled

questionnaire, which might not be as accurate as done by the interview method. Finally, there is a possibility of bias in the outcome measures if the girls other than that of second year intermediate level had different experience than those who were available and participated in the study. Therefore, the prevalence of sexual harassment in this age group needs further verification.

CONCLUSION

In summary, most of the female students from public college were found to have been the victim of sexual harassment in public vehicle of which verbal abuse was the most common form of sexual abuse followed by physical and non-verbal abuse. The harasser in this study was mostly reported as young male passengers in all types of harassment. However, half of the victims preferred to keep silence in this matter and almost all of them were found unwilling to file complaint to police against the harasser due to their perceived issues.

This study provided a new perspective to the underexplored area of sexual harassment in public vehicles and opened the door for a large-scale study to get the actual scenario of its prevalence as well as its associated factors and various impacts throughout the nation. Further, finding of the study recommends the concerned organizations to conduct awareness program in relevant areas as well as strengthen the abuse reporting process ensuring safe, confidential and adolescent friendly environment. Girls are our future; we must take care of them and bring them up in a safe society that is free of sexual harassment related issues.

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