Original Research Article

Cyber bullying: an emerging problem in COVID-19 times among students taking online classes undergoing graduation in North India

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ABSTRACT

Background: As COVID-19 continues, academics have shifted from practical and virtual classes to web-based online lectures. Being an online portal, virtual offences can also take place. One of them is cyberbullying. Students are already undergoing phase of psychosocial changes because of this scenario. If an incident of cyberbullying happens with them or with their friends and siblings, it causes a great impact on their mental health. To determine the prevalence of cyberbullying among students who were currently taking online classes.
Methods: An online cross-sectional study was conducted through Google form from July to September 2020 on the students >18 years taking online classes. All the students who gave consent and filled the form were included. The aim of the study was explained. Information collected was kept strictly confidential.
Results: A total of 462 participants (mean age=22±4 years) completed an online survey comprising of about 55% females and 45% males. Around 22% of the study subjects had reported that they were bullied either in schools or previously also. Through this online survey nearly 11% of the study subjects reported that they were cyber bullied in the past 2-3 months and about 13% were not sure whether they were cyberbullied or not. There is statistically significant difference (p value=0.0081) between gender and cyberbullying and also among medical and non-medical students (p value=0.0001).
Conclusions: Cyberbullying is increasing along with online classes which is more experienced with girls. According to this study, it is more experienced by the girls now a days. There is a marked difference in the occurrence of cyberbullying among medical and non-medical streams.

Keywords: Cyberbullying, Online, Students, North India

INTRODUCTION

Corona virus disease-19 (COVID-19) was first reported in cluster of pneumonia cases of unknown etiology from Wuhan, Hubei, Mainland China on 8th December 2019.[1] The virus that causes COVID-19 was initially called as 2019-nCoV and later termed as Severe acute respiratory syndrome coronavirus two (SARS-CoV-2) by the International Committee on Taxonomy of Viruses (ICTV).[2] With rapid spread of COVID 19 in China, WHO first reported this disease as public health emergency of International concern, which was later on announced as a COVID-19 pandemic on 11th March 2020.[3] First case of COVID-19 in India was reported on 30th January 2020 in three students from Kerala who had been studying at Wuhan University.[4] Being transmitted through respiratory system of highly contagious nature, the lockdown had been imposed from 22nd March onwards in India.[5]

Everything had been shut down from temples to malls, from school to coaching centers, from playgrounds to universities. As a result of which classroom study of all streams has been shifted to online study as a whole not for a day or two but for months. Students moved from using the Internet as an extra in everyday communication to

using it as the primary mode of learning and communication both till on campus classes resumes. This shift from face-to-face communication to online communication has created many unique and potentially harmful dynamics for social relationships- one such dynamic has recently been explored in the literature as Cyber-bullying (CB).[5,6,9]

CB is defined by Smith et al as an 'aggressive, intentional act carried out by a group or individual, using electronic forms of contact, repeatedly and over time against a victim who cannot easily defend himself or herself'.[7] While the pandemic is increasing the use of online instruction the problem of CB is not deemed by many scholars as 'new' phenomenon but it may be new for specific jurisdictions with limited technological use prior to pandemic. Thus, an emerging form of bullying taking place while using electronic technology by text or media messages, mass e-mailing, and over Internet blogs or social networking sites. CB is defined as 'inappropriate, unwanted social exchange behaviors initiated by a perpetrator via online or wireless communication technology and devices'.[8] Forms of CB include 'anonymous, fraudulent, aggressive, unwanted messages, spreading rumors, hacking into email accounts, threats, harassment, attacks, unwanted phone calls, malicious, abusive messages'.[9] It is repeated and hurtful, it can be intense; it involves an imbalance of power; and it creates feelings of powerlessness.[10] Most definitions of bullying rely upon three criteria; intent to harm, imbalance of power, and repetition of the act.[7] CB also can happen accidentally or unknowingly. The scope of CB is vast, in terms of means as well as content. The impersonal nature of text messages, instant messages, comments, social media platforms, or in chat rooms and eelectronic mails makes it very hard to detect the sender's tone-one person's joke could be another's hurtful insult. However, a repeated pattern is rarely accidental and by mere chance.

In case of CB, this becomes relatively easy, where the power of one click of smart device is immense and increases the target population by thousands, thus increasing the humiliation and impact of bullying exponentially. It varies from posting hurtful words, derogatory comments and pictures, posting fake information on public forums or blogs, hacking accounts for personal benefits. The impact of such acts can be catastrophic, especially for adolescents and young adults, who feel so embarrassed and humiliated that they cannot imagine surviving the next morning, and end up taking extreme steps which include harm to self and occasionally others. It deeply reflects the real-world problems arising out of the virtual cyberspace. No longer limited to schoolyards or street corners, it has now moved to social media like WhatsApp, Snapchat, Twitter, Facebook, where online polls are conducted to body shame the victim and groups are made to spread false rumors or share morphed pictures and videos, to a rather vast audience with the power of the Internet, which would not have been so easily possible in the physical world otherwise.[21] Scholars have

long recognized that prevention of youth aggression and bullying is a major public health issue.[11-13]

In the past decade or so, CB has become a major public health problem around the world.[6] Global Youth Online Behaviour Survey by Microsoft in twenty-five countries such as United States, United Kingdom, Australia, Germany, Pakistan, India, Japan and few other countries, India has ranked third in cyber-bullying.[19] CB is still not considered a major public health problem in India. A recent study by Child Rights and You, a non-governmental organization found that around 9.2% of 630 adolescents surveyed in the Delhi-National Capital Region had experienced CB and half of them had not reported it to teachers, guardians or the social media companies concerned.[24]

Around 54.3% of parents with children ages nineteen and older reported their children were bullied of which cyber bullying accounts for one fifth of them.[25] With increasing availability of smartphones and social media, Indian children, adolescents and young adults are having increased access and exposure to cyber world. Internet undoubtedly provides new information and easy social networking, but also has risk of CB, cyber victimization, internet addiction, internet frauds and other health risks.[3] Cyber-bullies may feel protected and able to act with fewer constraints and, being remote from their targets, may not recognize or may be more able to ignore a target's distress. Targets may not know who is bullying them, leading to feelings of helplessness and invasion of privacy, fear and being pursued, 'haunted' and 'hemmed in' with few opportunities for redress.[3,18,19]

In this ongoing era of COVID-19, student learning modalities have shifted from practical and virtual classes to web based online lectures where at a time many students can take part. Being an online portal, students have chance of reveal and hide their identity too because of which not necessary things can also take place like playing songs, writing abusive language etc. Students are already undergoing phase of psychosocial changes because of this scenario.[6] On the top of this if an incident of cyber bullying happens with them or their known ones, it causes a great impact on their mental health, so we planned this study to determine the prevalence of cyber bullying among students who are currently taking online classes.

Objective

The objective of this study was to determine the prevalence of cyber bullying among students undergoing graduation taking online classes in North India.

METHODS

A cross sectional web-based survey in the form of google form was conducted from July-September 2020 (3 months) in Delhi NCR region on the students taking online classes for more than one month.

All the students belonged to upper or upper middle socio-economic status and those who gave consent filled the form till July 2020 were considered for analyses. Sampling was done using snow-balling, a type of non-random sampling where participants were recruited via email and as survey progresses and when one individual was surveyed; he or she was invited to recommend others to be surveyed. Students more than 18 years doing graduation were included who were taking online classes since April 2020. Those who gave negative consent were excluded from study.

To date there are not specific and well-validated measures of cyber-bullying that are suitable for use in the university students and many of those in use were web based and through literature. Established criteria for classifying participants as cyber-bullied have yet to emerge. Accordingly, we developed our own set of items, after reviewing a range of other measures.[26,27] Preliminary pilot testing was done on batch of 30 internship students from the same university to elaborate what they thought about each questionnaire item and their corresponding response and then the questionnaire was validated using test-retest reliability on another batch of internship students. They were given the questionnaire a week apart and then the reliability was evaluated using Pearson's product moment correlation coefficient (Pearson's) or the intra class correlation coefficient.[27] Only those questions and answer options were included which were found to be significant. The content validity was done using the literature mentioned in references related to CB.

CB was measured using a list of around ten negative acts drawn from a range of sources mentioned in introduction. Responses were collected on same platform of Google forms and an excel sheet was generated which later on was imported to SPSS.

Study variable

Dependent or outcome variable were prevalence of CB. Independent variable, and covariates were gender and stream.

Statistical analysis

Self-identified bullying was examined by providing participants with a definition of bullying (given above) and asking whether they considered themselves to have been bullied over the last 3 months. Number with percentage were calculated for categorical variables. Chi-square test was used to find the association by using odds ratio with 95% CI. The results were considered statistically significant with $p<0.05$.

All statistical analyses were performed using Statistical Package for Social Sciences (SPSS) 21 trial version, International Business Machines Corporation (IBM, New York, USA).

Surveying process

A twenty-item questionnaire was developed using Google Forms and short URL was distributed using the quick mode of communications including emails and whatsapp among participants. The questionnaire was delivered in English as all were students undergoing graduation. Consent was taken from all participants in the study using a covering letter clearly explaining aims and objective of study, details of organization conducting this survey, method of recruitment of study population and encouraging words for their participation which were shared with questionnaire form. The response was anonymous and confidential.[23] The 20-items questionnaire comprised of a pretested questionnaire (Google form) comprised of basic academic information and questions related to CB.

Ethical approval

This was a cross-sectional study anonymous and web-based by nature without intervention. Consent was obtained from participants. Approval of the study protocol was obtained from institutional ethical committee and all research data was kept secure and participant confidentiality was maintained.

RESULTS

Sociodemographic characteristics

A total of 462 participants (mean age=22±4 years) completed an online survey which examined the perceived definitions and frequency of cyber-bullying. The participants comprised of about 55% of the females and around 45% of the males. Out of those participants nearly 62 percent belong to medical background either Medical, dental or nursing students and around 38 percent belong to either engineering, law, architecture or economics background. The mean time since taking online classes for the students is 2.5 months and the mean time spent during online classes were 5.6 hours/day which is comparatively more for medical group of students. All the participants had internet connection throughout the day.

Main variable (dependent or outcome) results

Through this online survey nearly 11% of the study subjects reported that they were cyberbullied in the past 2-3 months and about 13% were not sure whether they were cyberbullied or not.

Other variable (co-variates) results

Around 22% of the study subjects admitted that they were bullied either in schools or previously before march 2020, traditional and on social platforms. Nearly 19% reported incidences of CB them or with their known ones in the past. According to this survey females were more cyber bullied than the males as seen in Table 1 and the results are

statistically significant also and prevalence of CB is more among medical group of fraternity as seen in Table 2 and results here are statistically significant too. When asked about definition of CB the most common response (about 37%) came 'when some student bullies another student on the internet or social media intended to harm' followed by 'when you send mean text messages or pictures to another student through personal messages or in groups'. Out of those cyber bullied 51 (11%), only 36 students reported to someone else and those who didn't reported don't considered it as a major issue. The subjects who responded, mostly discussed the incident with their friends followed by parents as shown in Figure 1.

Table 1: Gender wise association of study subjects with CB (n=462).

Cyberbullied	Male		Female		Total	
	N	%	N	%	N	%
Yes	21	41.1	30	58.8	51	11
May be	16	27.1	43	72.9	59	12.8
No	169	48	183	52	222	76.2
Total	206	44.6	256	55.4	462	100

Note: Chi square value=7.009, df: 1, two tailed p value=0.0081.

Table 2: Table representing stream wise association of study subjects with cyber bullying (n=462).

Cyberbullied	Medical		Non-medical		Total	
	N	%	N	%	N	%
Yes	28	55	23	45	51	11
May be	23	39	36	61	59	12.8
No	238	67.6	114	32.4	222	76.2
Total	289	62.5	173	37.4	462	100

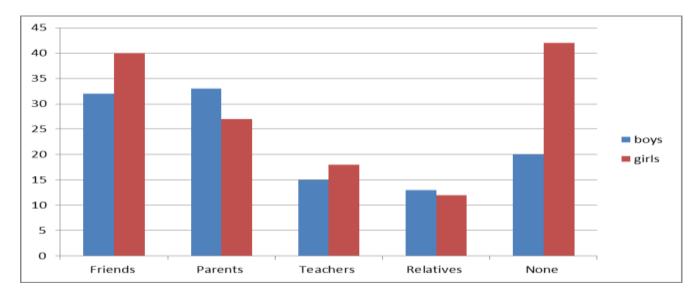Note: Chi square value=16.157, df: 1, two tailed p value=0.0001.

Figure 1: Figure representing gender wise distribution of reporting of cyber bullying among study subjects (n=110)-multiple responses.

DISCUSSION

As very few studies had been done about this topic in youth, more are being focused on adolescents. In our study the sample size comprised of 55% female and 45% male almost similar to the study done in Chennai.[22] We found 11% prevalence plus nearly 13% who were not sure of cyber bullied unlike study done by Lavanya and little less than study done by Qudah and others.[20,22] In our study we found that there is statistically significant difference between gender wise prevalence of CB not coinciding with study done in Chennai.[22] The results can be due to survey being an online forum, females might be able to respond more without any fear due to anonymous nature or it can be that males were not taking those things very seriously. Females here are more victimized as compared to male. When we compared the CB prevalence among medicos and non-medicos we found the technology friendly people reported more about the incidences. According to maximum participants CB is 'when some student bullies another student on the internet or social media intended to

harm' followed by 'when you send mean text messages or pictures to another student through personal messages or in groups'similar to the findings of study done by Lavanya et al.[22] The results might due to two reasons overlapping groups (adolescents and youth in the studies) secondly the statement given are broad and can include many things not very specific. Only 36 students reported to someone else and those who did not reported do not considered it as a major issue or did not want themselves to get into trouble.

Limitations

Relatively small sample size. Web based survey, non-response might be more.

CONCLUSION

As prevalence came out to be 11%, there is a need for further study that can cover a larger area especially among this era. This mere percentage might be representing the iceberg of this new generation problem. So it is appropriate time to improve the mental health also along with giving the knowledge for future outcomes of CB.

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