



Experience of Loneliness and Social Support during COVID-19 Confinement: A Nation-wide self-Assessment among Undergraduates of Nepal

Kushalata Baral¹, Maginsh Dahal^{2*}, Sudip Khanal¹, Poonam Subedi¹,
Kabita Pathak³, Akriti Kafle⁴ and Pratikshya Gurung⁵

¹Department of Public Health, Nobel College., Pokhara University, Sinamangal, Kathmandu, Nepal.

²School of Public Health, Nanjing Medical University, Nanjing 211166, China.

³Department of Humanities, Pashupati Multiple Campus, Tribhuvan University, Kathmandu, Nepal.

⁴Department of Nursing, Charak Academy, Purbanchal University, Pokhara, Nepal.

⁵Department of Public Health, Asian College for Advance Studies, Purbanchal, University, Lalitpur, Nepal.

Authors' contributions

This work was carried out in collaboration among all authors. Author KB conceived of present idea. Author MD carried out project. Author SK carried out statistical analysis. Authors PS, KP, AK and PG wrote the manuscript with the help and guidance of author MD. All authors read and approved the final manuscript.

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ABSTRACT

In the account of the social nature of human beings, the given difficult circumstance due to COVID-19 may call upon social loneliness, emotional loneliness, and moreover, lack of perceived social support. We aim to elucidate by assessing the level of loneliness and the level of social support perceived by college students amidst the COVID-19 lockdown. A web-based cross-sectional survey was conducted among 970 Nepalese undergraduate students. Responses were extracted,

*Corresponding author: E-mail: maginsh@gmail.com;

cleaned, and analyzed with the help of R-studio (version 1.2.5033). Descriptive statistics such as frequency, percentage, mean and standard deviation described participants' demographic characteristics. Karl Pearson's Correlation analysis and significant test of correlation for loneliness, social support, and their various subscales, respectively were significant at 0.1%, 1%, and 5% level of significance. The mean age of respondents was 22.2 years (SD =2.74). Significant correlations were observed among social loneliness, emotional loneliness, overall loneliness (social loneliness and emotional loneliness combined), social family support, social friends support, social significant others support, and total social support (that is to say, all the social support subscales). The study reported that a decrease in social support leads to an increase in loneliness. Likewise, a decrease in social support from family, friends, and from significant others can increase emotional and overall loneliness.

Keywords: Confinement; COVID-19; loneliness; social support; Nepal.

1. INTRODUCTION

Loneliness: The experience of emotional and social isolation' describes loneliness as a natural response of the individual to specific situations and not as a form of weakness [1]. Meanwhile, loneliness is a "situation experienced by the individual as one where there is an unpleasant or inadmissible lack of (quality of) certain relationships that include situations, in which the number of existing relationships is smaller than is considered desirable or admissible, as well as situations where the intimacy one wishes for has not been realized" [2]. Loneliness is broadly categorized into social loneliness and emotional loneliness. Social loneliness is the loneliness resulting from the absence of a broader group of contacts or an engaging social network (friends, colleagues, and people in the neighborhood) [1]. Emotional loneliness is the loneliness from the absence of an intimate figure or a close emotional attachment (a partner, a best friend) [3]. Social support plays an important role in well-being, and is one of the major preventative efforts to reduce the spread of COVID-19. During this time social support is emphasized as a coping mechanism. This requires many people to change their ways of connectedness and assumes that people have existing healthy relationships or access to technology [4].

In simpler terms, the discrepancy between existing social support and the need/desire for social relationships causes loneliness [5]. Further on social support, it is the multidimensional construct inclusive of three dimensions: family support (the extent to which individuals perceive that they receive support from members of their family); support from friends (the extent to which individuals perceive that they receive support from their friends); and support from significant others (the extent to which individuals perceive

that they receive support from others who are not their relatives or friends) [6]. Individual differences in personality and behavior such as extreme shyness or the lack of social skills may interfere with creating or maintaining satisfying social relationships and thereby set the stage for loneliness [5,7]. Rather than being a sign of weakness, loneliness reflects the human need for social relationships, all people's needs [5]. In addition, loneliness and lack of social support are associated with mental health problems [8].

On account of COVID-19 as a pandemic, it has called upon a paradigm shift into the new normal where each one of us, from children, young adults to the elderly, is bound to accept this shift and impose it on our everyday lives [9]. The social nature of human beings, the given difficult circumstance due to COVID-19, may call upon social loneliness, emotional loneliness, and lack of perceived social support(4). Although people from all walks of life are affected, we have taken the college students in our study to assess the loneliness and perceived social support in this time of the pandemic. We did it because college circumstances give exposure to mass gatherings, social interactions, and a sense of social support from their friends and teachers in addition to the family's support.

Loneliness was one of the least faced emotions among students, as the majority of them were living with family members during the confinement [10]. Perceived social support moderated the relationship between loneliness and anxiety due to COVID-19. More the feeling of social support more is the feeling of being cared for. Lonely people were more anxious which lead to high chronic anxiety in daily life at the peak of the disease [11]. People living alone reported higher daily loneliness which linearly increased during the first weeks after the

implementation of pandemic-related measures. Younger respondents were more likely to report a high level of loneliness over time [12]. The social isolation due to the lockdown measures had the worst impact on youth with already existing mental health care needs with greater loneliness compared to those without mental health needs. Also, increased contacts with family were more than with friends were seen among those with mental health needs. However, youth with no mental health needs showed an increased time spent with friends [13]. Pre-existing mental health issues, younger adults, and students were at high risk of experiencing high levels of loneliness, but certain social conditions such as living with others, having close friends, and having strong perceived social support were supportive factors [14]. Students showed an increase in loneliness [15]. Being an out isolate in a friendship network is associated with increasing loneliness. However, factors induced by the COVID-19 crisis i.e. individuals having smaller personal networks, females, not being in a romantic relationship appear to become more lonely. On contrary, those with more emotional support were less lonely. Factors like university lockdown influenced social isolation leading to the development of mental health problems [16].

Moreover, there have been limited studies on loneliness and social support among college students during COVID-19 lockdown. So, this study aims to elucidate this matter by assessing the level of loneliness and the level of social support perceived by college students amidst the corona crisis and the COVID-19 lockdown. The study findings will provide significant evidence for the families, concerned authorities like colleges and universities to address the mental health concerns of the college students.

2. METHODS

2.1 Study Design, Participants, Sample size, and Data Collection

A web-based cross-sectional survey was conducted among Nepalese undergraduate students. Convenient sampling was used as interested participants could select themselves for participation [17]. Among 1012 individuals who accessed the survey, a total of 970 participants gave consent and accomplished the online survey- a reply rate of 95.85%. Some of the participants didn't provide complete information like COVID-19 status of friends and special

person (964) and place of residence during confinement (968). So we kept it not applicable for those who didn't give complete information. The preparation, maturity, and reporting of the survey followed the Checklist for Reporting Results of Internet E-survey (CHERRIES) guidelines [18]. The questionnaire was developed in Google forms. A team of 11 researchers from different public health and nursing colleges of Nepal reviewed the contents of the tool and helped in the finalization. Call for involvement, were made available publicly. The survey was promoted on social media such as Facebook, Instagram, Linked In, and Twitter to increase participation. The survey took approximately 5-7 minutes to complete. Only core members have access to the data repository for maintaining data privacy.

2.2 Survey Instruments and Variables

A structured questionnaire was developed by reviewing the relevant available literature, and the WHO's published resources on COVID-19 [19,20]. The online survey questionnaire was organized into three different sections: (1) socio-demographic information, (2) loneliness scale, and (3) social support during COVID-19 confinement.

2.3 Study Variables

Socio-Demographic Information: The section on socio-demographic characteristics collected information on participants' age, gender, ethnic group, religion, marital status, living situation, place of residence during confinement, type of confinement, COVID-19 status of self, family members, friends, and special person. Likewise, the COVID-19 status was classified as non-infected and suspected/infected.

Social support: Another tool used in the study was the Multidimensional Scale of Perceived Social Support (MSPSS), an assessment scale by Gregory Zimet, Nancy Dahlem, Sara Zimet, Gordon Farley. The Multidimensional Scale of Perceived Social Support (MSPSS) is a brief research tool designed to measure perceptions of support from 3 sources: Family, Friends, and a significant other- special person (girlfriend/boyfriend, fiancé, relative, neighbor, or doctor). In this study, we used this scale to assess the measures of social support perceived by the students during the period of COVID-19 lockdown. The scale consists of a total of "12 items" with "7 scales" ranging from "Strongly

agree” to “Strongly disagree.”The standard tools have been used in a wide range of samples providing adequate evidence supporting its reliability and validity.

Loneliness: De Jong Loneliness Scale developed by De Jong Gierveld was used in this study to assess emotional and social loneliness during COVID-19 lockdown. In this 6-item scale, three statements are made about ‘emotional loneliness’ and three about ‘social loneliness’. The study intended to assess Social Loneliness (SL) which occurs when someone is missing a wider social network and Emotional Loneliness (EL) when you miss an “intimate relationship”.

2.4 Statistical Analysis

Participants’ responses from google forms were extracted and cleaned using Microsoft Excel. The final data was analyzed with the help of R-studio (version 1.2.5033). Descriptive statistics such as

frequency, percentage, mean, and standard deviation described participant’s demographic characteristics. Karl Pearson’s Correlation analysis and significant test of correlation for loneliness, social support, and their various subscales, respectively, were significant at 0.1%, 1%, and 5% level of significance.

3. RESULTS

Table 1 shows that the mean age of respondents was 22.2 years (SD =2.74). Most of them were female 685(70.4%), Brahmin/ Chhetri 662(68.2%), Hindu 913(94.1%), unmarried 831(85.7%), living with parents 868(89.5%), living in metropolis 431(44.4%), under non-rigid confinement576(59.4%) with most of the students themselves, their family members, their friends and special person like a boyfriend, girlfriend or fiancé being non-infected from COVID:909(93.7%), 940(96.9%), 893(92.1%)and 367(37.8%) respectively.

Table 1. Socio-demographic information of the study variables (n=970)

Demographic Characteristics	Category	Frequency	Percent	95% CI
Age	Mean±SD	22.2±2.74		
	< 22 years	436	44.9	41.8-48.1
	≥ 22 years	534	55.1	51.9-58.2
Gender	Male	285	29.4	26.6-32.4
	Female	685	70.6	67.6-73.4
Ethnic Group	Brahmin/Chhetri	662	68.2	65.2-71.2
	Dalit/Janajatis	229	23.6	21.0-26.4
	Madhesi	79	8.1	6.5-10.1
Religion	Hindu	913	94.1	92.4-95.5
	Others	57	5.9	4.5-7.6
Official Marital Status	Married	75	7.7	6.2-9.6
	Unmarried	831	85.7	81.3-86.0
	In a Relationship	64	6.6	5.2-8.4
Living Situation	Living with Parents	868	89.5	87.3-91.3
	Living alone	42	4.3	3.2-5.9
	Living with Spouse	60	6.2	4.8-7.9
Place of Residence During Confinement(n=968)	Metropolis	431	44.4	41.3-47.6
	Sub metropolis	87	9.0	7.3-10.9
	Municipality	403	41.5	38.4-44.7
	Rural Municipality	47	4.8	3.6-6.4
Type of Confinement	Extremely rigid confinement	341	35.2	32.2-38.3
	Partially rigid confinement	53	5.5	4.2-7.1
	Non rigid confinement	576	59.4	56.2-62.5
COVID-19 Status of Self	Non-Infected	909	93.7	91.9-95.1
	Suspected/Infected	61	6.3	4.9-8.1
COVID-19 Status of Family Members	Non-Infected	940	96.9	95.6-97.9
	Suspected/Infected	30	3.1	2.1-4.4
COVID-19 Status of Friends (n=964)	Non-Infected	893	92.1	90.1-93.6
	Suspected/Infected	34	3.5	2.5-4.9
	Not Applicable	43	4.4	3.3-5.9
COVID-19 Status of Special Person (n=964)	Non-Infected	367	37.8	34.8-40.3
	Suspected/Infected	28	2.9	1.9-4.2
	Not Applicable	575	59.3	56.1-62.4

Table 2. Correlation between loneliness and social support

Correlation matrix	Social Loneliness	Emotional Loneliness	Overall Loneliness	Social support from family	Social support from friends	Social support from significant other	Total Social Support
Social Loneliness	1						
Emotional Loneliness	-0.12	1					
Overall Loneliness	0.55	0.76	1				
Social Family support	0.21	-0.25	-0.08	1			
Social friends Support	0.25	-0.28	-0.07	0.96	1		
Social others Support	0.24	-0.23	-0.04	0.54	0.60	1	
Total Social Support	0.26	-0.28	-0.07	0.92	0.94	0.82	1

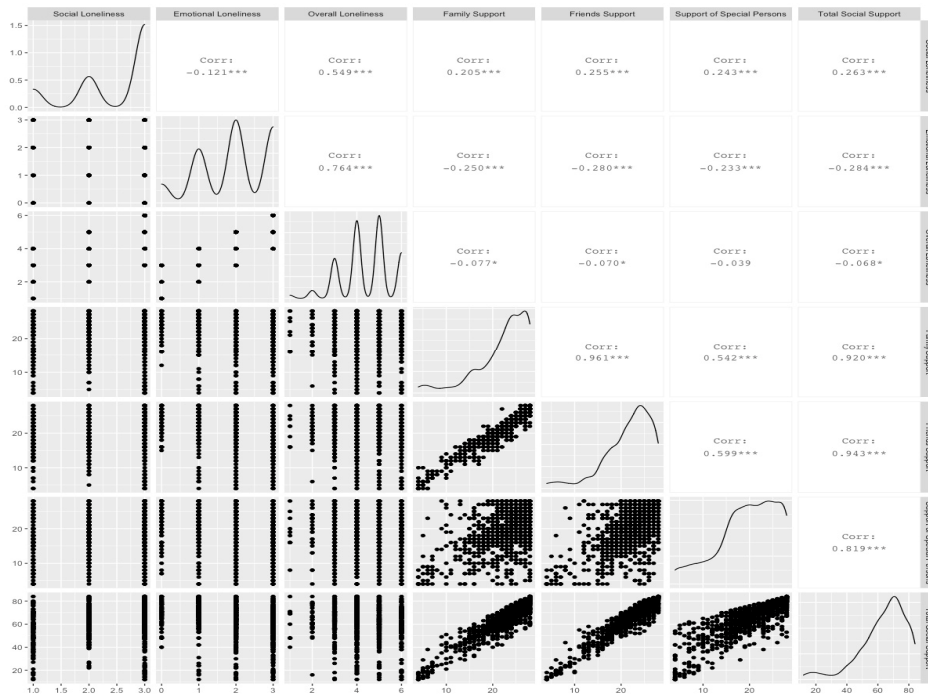


Fig. 1. Significant relationship between various Loneliness and Social support domains
 ***, **, * significant at 0.1%, 1% and 5% level of significance

Table 2 and Fig. 1 represent the results of Karl Pearson’s Correlation analysis and significant test of correlation for loneliness, social support, and their various subscales, respectively. Significant correlations were observed among social loneliness, emotional loneliness, overall loneliness (social loneliness and emotional loneliness combined), social family support, social friends support, social significant others support, and total social support (that is to say, all the social support subscales).

The following observations were made: total social support and overall loneliness had a significant correlation ($r = -0.07, P < 0.001$), social support from family had a significant correlation with social loneliness ($r = 0.21, P < 0.001$), emotional loneliness ($r = -0.25, P < 0.001$), and overall loneliness ($r = -0.08, P < 0.001$); social support from friends had a significant correlation with social loneliness ($r = 0.25, P < 0.001$), emotional loneliness ($r = -0.28, P < 0.001$), and overall loneliness ($r = -0.07, P < 0.001$); social support from significant other had a significant correlation with social loneliness ($r = 0.24, P < 0.001$), emotional loneliness ($r = -0.23, P < 0.001$), and overall loneliness ($r = -0.04, P < 0.001$). The study revealed a negative relationship between total social support and

overall loneliness, social support from family and emotional loneliness, social support from family and overall loneliness, social support from friends and emotional loneliness, social support from friends and overall loneliness, social support from significant other and emotional loneliness, and social support from significant other and overall loneliness. Moreover, the study reported that a decrease in social support leads to an increase in loneliness. Likewise, a decrease in social support from family can predict an increase in emotional loneliness and overall loneliness. Similarly, a decrease in social support from friends increases emotional loneliness and overall loneliness. In addition, a decrease in social support from significant other increases emotional loneliness and overall loneliness.

4. DISCUSSION

Loneliness is the perceived situation that arises from the discrepancy between existing relationships and expected social and emotional relationships. Hence, the presence of social support can influence the state of loneliness in an individual. In other words, social support and loneliness are closely associated. Especially on the college-going younger individuals, in the

context of the COVID pandemic, they are prone to the feeling of loneliness and lack of social support. A study on the impact of social support, loneliness, and worry among university freshmen also claimed a correlation interrelationship between social support and loneliness [21]. Seeking social support was favorable when students are not bored or alone. Most of the students lived with their families during the confinement due to which emotions like loneliness and fear were the least [10]. Daily loneliness levels increased when the confinement was at its peak and decreased thereafter [12].

Similarly, a study on the perceived social support and loneliness among Chinese adolescents also reported a significant negative correlation between perceived social support and loneliness ($r = 0.440$, $P < 0.01$) [22]. In support of this, another study on perceived social support, social-emotional experiences, and psychological wellbeing of international students also resembled similar findings. The study claimed that an increase in perceived social support lowered loneliness among the students [3]. Another study on attachment style perceived social support, and loneliness among college students also found that there is a negative correlation between perceived social support and loneliness ($r = -0.19$, $P < 0.01$) [23]. Younger adults, females, people with mental conditions were more likely to be in the highest loneliness class. Living with others in rural areas and those with more friends and greater social support was a protective factor for loneliness [14].

Thus, in the present study, the correlation analysis showed a significant relationship between total social support and overall loneliness ($r = -0.07$, $P < 0.001$). In simpler terms, the study found that when there is higher social support, the feeling of loneliness among college students is lower. When COVID 19 situation was inverted from its peak, social support from significant other and friends protected lonely people from anxiety. However, relationships and support from family members were most important when everyone was fighting loneliness and confined at home [11]. Amidst the COVID-19 pandemic, college-going students have had a huge transition in their daily lives. Daily meetups with friends, teachers, and the college community are now bound to their homes and isolate from social interactions due to the COVID-19 lockdown imposed by the government. It can be intimidating for these

young people because, in the youths, people are closer with their friends and express themselves better, which also helps them cope with their feelings. This can also be the reason for the higher loneliness and lowered social support due to the social isolation during the COVID-19 lockdown.

The study also reported that there is a significant correlation between social support from friends and loneliness ($r = -0.23$, $P < 0.01$), between social support from family and loneliness ($r = -0.08$, $P < 0.01$), and between social support from significant other and loneliness ($r = -0.23$, $P < 0.01$). It means that an increase in social support from friends, family, or significant others reduces the feeling of loneliness among the college students under the study [23]. In the context of the present study, our findings are in line with these research findings [23]. In our study, there is a negatively significant correlation between all individual subscales of perceived social support and loneliness, respectively. The correlation analysis between social support from friends and loneliness ($r = -0.07$, $P < 0.001$), between social support from family and loneliness ($r = -0.08$, $P < 0.001$), and between social support from significant other and loneliness ($r = -0.04$, $P < 0.01$) revealed that higher the social support from friends, family, or significant other, particularly, lowered the feeling of loneliness. Greater loneliness among the youth was provoked by the social isolation created by the COVID-19 pandemic as they were making fewer contacts with friends due to the distress caused by lockdown measures [13]. The crisis worsened student's level of loneliness along with the extension of lockdown. Worries related to COVID-19 disease, isolation in social networks, lack of emotional support, and physical isolation were some major factors associated. The network analyses show that the functional social networks between students i.e. interaction and studying decreased while friendship and support networks remained stable. Students affected by the disease had fewer contacts in each network and were more likely to indicate that they were isolated. Students felt significantly more socially isolated, more worried about family and friends, more worried about their careers, and less competition among students [16].

The present study has several limitations. First, the study used an online assessment method due to the COVID-19 lockdown; hence the study participants are limited to only those college students who have internet access. Another, the

study does not include other groups like elderly people who are also equally vulnerable to loneliness and social support during COVID-19 lockdown and is limited to the younger population. Thus, the findings cannot be generalized among the Nepali population about loneliness and social support.

5. CONCLUSION

The study revealed that the relationship between perceived social support and loneliness among college students. Moreover, social support is responsible for loneliness. Increased social support from family suppressed the emotional quotient which might create long term intimate relationship issues. Therefore, it is recommended that colleges should make provision of social support through student clubs, programs aimed at student's mental health, and psycho-socio counseling in the college. Similarly, the family should create a conducive environment to enhance social support from the family and mitigate any feeling of loneliness in the students.

DATA AVAILABILITY STATEMENT

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

CONSENT AND ETHICAL APPROVAL

The Institutional Review Committee of Nobel College approved this study. Participation in the survey was voluntary, no incentive was provided to participants. The beginning of our web-based survey had an informed consent page that provided details of the study and consent (or decline) to participate in continuing the research. Written informed consent was taken from each participant. Participation in this study was entirely voluntary. Confidentiality of the information was ensured and maintained by the coding system.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

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