Original Article

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Social Media Use and Loneliness Among Older Adults in Kathmandu

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ABSTRACT

Background: Older individuals are mostly susceptible to loneliness and social media platforms provide a means for older adults to maintain social and emotional connections contributing to improved mental health outcomes. Thus, this study aims to examine the relationship between social media use and loneliness among older adults.

Methods: A descriptive cross-sectional study was conducted among 138 older adults using purposive sampling technique (aged 65+) in Kathmandu Metropolitan City. Data was collected via face-to-face interview using a semi-structured questionnaire and the University of California Los Angeles (UCLA) Loneliness Scale. Data analysis was performed using SPSS version 20.

Results: About two third of the respondents (71%) were aged between 65–75, with males representing 56.5%. The majority (77.5%) were married and 61.6% belonged to the Bramhan/ Chhetri ethnic group. Roughly 64% had basic education, 58% reported having enough resources for the year, and 96.4% lived in joint families with perceived family support. About 45% of respondents experience a high level of loneliness, while 24.6% report very high levels. The overall mean loneliness score is 25.10 ± 7.6 indicating moderate loneliness across the group. Messenger use was significantly associated with higher loneliness levels ($p = 0.018$), whereas no significant association was observed between daily social media use and loneliness ($p = 0.143$).

Conclusion: This study concludes that social media use is highly prevalent among older adults with most respondents engaging in daily use for communication and social interaction. The study identified that specific patterns of social media use, particularly frequent use and engagement with platforms such as Messenger, were significantly associated with increased loneliness which may not adequately fulfill the emotional and social needs of older adults. Instead, certain usage patterns may contribute to feelings of isolation. Therefore, it is essential to promote balanced and meaningful use of social media alongside strengthening real-life social support systems.

Keywords: Loneliness, older adults, social media

INTRODUCTION

Globally, the proportion of older adults is increasing rapidly, and loneliness has emerged as a significant public health concern among this population due to its association with adverse physical and psychological outcomes.[1] Loneliness has been linked to depression, cognitive decline, sleep disturbances, and increased mortality among older adults.[2] Older adults are particularly vulnerable to loneliness due to life transitions such as retirement, bereavement, declining health, and reduced social networks.[3]

In Nepal, rapid urbanization, migration of younger family members, and the gradual breakdown of traditional joint family systems have further increased the risk of loneliness among the elderly population. [4] In addition, studies conducted

in Nepal indicate that 38.7% of older adults experience moderate loneliness and 16.9% suffer from severe loneliness. Factors such as living arrangements, childlessness, self-perceived health, sleep quality, and economic satisfaction are identified as major contributors. [5]

With the advancement of digital technology, social media platforms have emerged as important tools for communication and social engagement. [6] Applications such as Facebook and Messenger enable older adults to maintain relationships, share experiences, and stay connected despite geographical barriers. [7] Several studies suggest that social media use can enhance perceived social support and reduce loneliness by promoting interaction and engagement among users.[8,9]

Evidence from the United States indicates that older adults who use social media report higher levels of perceived social support and lower levels of depressive symptoms. [10] Similarly, research highlights the role of social media in maintaining family relationships and facilitating meaningful interactions, thereby improving mental health outcomes. [8,9] However, the relationship between social media use and loneliness remains complex and inconsistent. Some studies suggest that excessive or passive use of social media may increase loneliness due to superficial interactions, social comparison, and unmet expectations. [11] In contrast, other studies emphasize its potential benefits in improving emotional well-being among older adults. [9]

Despite increasing access to social media in Nepal, there is limited research examining its association with loneliness among older adults, particularly in urban settings such as Kathmandu.[4] Therefore, this study aims to assess social media use and its relationship with loneliness among older adults in Kathmandu.[3]

METHODS

A descriptive cross-sectional research design was used to assess social media use and loneliness among older adults. The study was conducted in Kathmandu Metropolitan Ward No. 16, located in Bagmati Province. Older adults aged above 65 years who were able to communicate clearly and had no diagnosed mental illness were included. A total of 138 respondents were selected using a non-probability convenience sampling technique.

Data was collected using a structured interview schedule. The instrument consisted of three sections: socio-demographic characteristics, social media use patterns, and loneliness assessment. Socio-demographic variables included age, sex, ethnicity, religion, marital status, educational status, occupation, type of family, living arrangement, monthly family income, and presence of chronic illness. Social media use pattern variables included availability of mobile phone and internet access, frequency and duration of social media use, types of social media platforms used (e.g., Facebook, YouTube, TikTok, WhatsApp, Messenger, and Instagram), purpose of social media use (such as staying connected, entertainment, and obtaining information), and perception regarding the impact of social media on communication and isolation. These sections were developed by the researchers based on an extensive review of literature and study objectives.

Loneliness was measured using the 10-item University of California, Los Angeles (UCLA) Loneliness Scale developed by Daniel Russell [12]. The items were rated on a 4-point Likert scale[4]. Loneliness levels were categorized as average (score 20), high (21–30), and very high (31–40).[5]The University of California Los Angeles (UCLA) Loneliness Scale has demonstrated strong psychometric properties, including high internal consistency (Cronbach's alpha = 0.89–0.94) and good test–retest reliability (r = 0.73) [12]. It also shows strong convergent and construct validity.[5] For use in the Nepalese context, the tool was translated into Nepali and back translated to ensure accuracy. Content validity was established through expert consultation and pretesting.

Ethical approval was obtained from the Institutional Review Committee of (TU IOM) Tribhuvan University Institute of Medicine (Ref no. 150). Permission was also obtained from the research department of MNC prior to data collection. Written informed consent

was obtained from all participants before data collection.

Home visits were conducted systematically, covering one street per day to minimize duplication. If more than one eligible respondent was present in a household, one was selected randomly. Data collection took approximately 25–30 minutes per respondent, with 5–6 interviews conducted daily from 5th November to 30th November 2024. Privacy and confidentiality were maintained by conducting interviews in a separate setting and using code numbers instead of names. Data were checked daily for completeness and accuracy. The data collected was coded and entered SPSS version 20 for analysis. Descriptive statistics (mean and standard deviation) were used to summarize the data, while inferential statistics (Chi-square test) were applied to determine the association between social media use and loneliness.

Table 1: Socio- demographic Characteristics of the Respondents (n= 138)

Variables	Number	Percentage
Age in years		
65–75	98	71.0
75 and above	40	29.0
Sex		
Male	78	56.5
Female	60	43.5
Marital status		
Married	107	77.5
Single	31	22.4
Ethnicity		
Dalit	40	29.0
Janajati	4	2.9
Muslim	9	6.5
Brahmin/Chhetri	85	61.6
Education		
Not able to read and write	19	13.7
Basic education level (1–8)	88	63.7
Secondary level (8–12)	25	18.1
University level (≥13)	06	4.35
Religion		
Hinduism	102	73.9
Buddhism	34	24.6
Christianity	2	1.4
Socio-economic status		
Not enough for one year	7	5.1
Enough for one year	80	58.0
Extra saving	51	37.0
Type of family		
Joint	133	96.4
Nuclear	5	3.6

Family support perceived		
Yes	133	96.4
No	5	3.6
Living status		
Alone	21	15.2
With family	117	84.8

Range (65-85=1

Table 1 shows that about two third of the participants (71%) are aged 65–75, with males representing 56.5% of the group. The majority (77.5%) are married, and 61.6% belong to the Brahmin/Chhetri ethnic group. More than half of the respondents (63.77%) have basic education, 58% report having enough resources for the year, and 96.4% live in joint families with perceived family support.

Table 2: Social Media Relat ed Characteristics of the Respondents (n = 138)

Characteristics	Number	Percentage
Usage of internet service	137	99.3
Usage of own mobile	137	99.3
Usage of social media	138	100.0
Frequency of social media use		
Daily	126	91.3
Weekly	3	2.2
Monthly	2	1.4
Rarely	7	5.1
Duration of social media use		
Less than 1hr	34	24.6
1-2	54	39.2
2-3	42	30.4
More than 3	8	5.8
Perceived effect of social media use*		
Increased communication	136	98.6
Decreased isolation	100	72.5
Increased isolation	15	6.0
Challenges in social media use*		
Device Hang	47	43.1
Uploading issues of photos	35	32.1
Difficulty Install in new apps	27	24.1

**Multiple response*

Table 2 illustrates that nearly all respondents (99.3%) have access to internet services and own a mobile phone, with universal social media usage reported (100%). The majority (91.3%) engage with social media daily, and a significant proportion (69.6%) spend between 1 and 3 hours on these platforms. Social media is predominantly perceived as a tool for enhancing communication (98.5%) and alleviating feelings of isolation (72.5%). However, challenges such as device malfunctions, specifically "hanging" (43.1%), were frequently reported.

Table 3: Loneliness Related Responses among Respondents Information of Loneliness (n=138)

Statements	1 No(%)	2 No(%)	3 No(%)	4 No(%)	Median (Q1,Q3)
Unhappy doing things alone	48(34.0)	22(15.9)	25(18.1)	43(31.2)	2(1,4)
Nobody to talk to	45(32.6)	36(26.1)	20(14.5)	37(26.8)	2(1,4)
Cannot tolerate being so alone	47(34)	21(15.2)	21(15.2)	49(35.5)	3(1,4)
Nobody really understands you	60(43.5)	14(10.1)	20(14.5)	14(31.9)	1(1,3)
Waiting for people to call or write	42(30.4)	16(11.6)	31(22.5)	49(35.5)	3(1,4)
Completely alone	49(35.5)	30(21.7)	25(18.1)	34(24.6)	2(1,4)
Unable to reach out and communicate	44(31.9)	21(15.2)	37(26.8)	36(26.1)	3(1,4)
Starved for company	34(24.6)	16(11.6)	24(17.4)	64(46.4)	4(2,4)
Difficult to make friends	48(34.8)	16(11.6)	30(21.7)	44(31.9)	2(1,4)
shut out and excluded by others	48(34.8)	24(17.4)	28(20.3)	38(27.5)	2(1,4)
Mean ± S.D.: 25.10±7.604, Range: 10-40)					

Never 1, Rarely=2, Sometimes=3, Often- 4

Table 3 reveals that a significant portion of respondents frequently experienced feelings of unhappiness when alone (34.8%), feeling they have nobody to talk to (32.6%), and feeling completely alone (35.5%). Furthermore, respondents reported feeling starved for company (46.4%), finding it difficult to make friends (34.8%), and feeling shut out and excluded by others (34.4%). This indicates challenges in forming and maintaining social connections. A significant number of respondents also feel as if nobody really understands them (43.5%).

Table 4: Level of Loneliness among Respondents (n=138)

Loneliness	Number	Percent	Median (Q1, Q3)	Range
Average	42	30.4	20(10,20)	20
High level of loneliness	62	44.9	30(21,30)	30
Very High level of loneliness	34	24.7	40(31,40)	40
Total	138	100		

Mean ± S.D. 25.10±7.6 , possible score=(10-40) , Obtained range=30

Table 4 The data shows that 44.9% of respondents experience a high level of loneliness, while 24.7% report very high levels, with loneliness scores ranging from 10 to 40. The overall mean loneliness score is 25.10 ± 7.6, indicating moderate loneliness across the group

Table 5: Association between Loneliness and Selected Socio-demographic Characteristics (n= 138)

Characteristics	Level of Loneliness				*p*- value
	Average No (%)	High No (%)	Very high No (%)	χ^2 value	
Age					
65–75	30(30.6)	42(42.9)	26(26.5)	13.34	0.58
76 and above	26(33.3)	32(41)	20(25.6)		
Sex					
Male	26(33.3)	32(41)	20(25.6)	1.176	0.55
Female	16(26.7)	30(50)	14(23.3)		
Ethnicity					
Bhramin/chhetri	25 (29.4)	37(43.5)	23(27.1)	4.58	0.376*
Others	17 (32.1)	25 (47.2)	11(20.8)		
Religion					
Hinduism	34 (33.3)	46 (45.1)	22 (21.6)	7.67	0.126
Others	8 (23.5)	16 (47.1	12 (29.4)		
Education level					
Basic level education	34(31.8)	47(43.9)	26(24.3)	0.410	0.811*
Secondary level education	8(25.8)	15(48.4)	8(25.8)		

**Indicate likelihood*

Table 5 shows that there is no significant association between loneliness and the socio-demographic characteristics of age, sex, ethnicity, religion, or education level, as indicated by p-values greater than 0.05. However, among the elderly aged 65–75, 42.9% reported high levels of loneliness, whileS Hinduism is associated with 45.1% of respondents having high loneliness, and those with upper basic education (grades 6–8) had the highest percentage (34.1%) experiencing very high loneliness. Despite these observations, no strong statistical significance is evident across the characteristics.

Table 6: Association of Level of Loneliness with Selected Variables (n=138)

Social media variable	Level of loneliness			χ^2 value	p-value
	Average	High	Very high		
	No (%)	No (%)	No (%)		
Frequency of social media					
Daily	36(28.6)	59(46.8)	31(24.6)	3.88	0.143
Non daily	6(50.0)	3(25.0)	3(25.0)		
Duration of use of social media (in hours)					
<1	15(44.1)	10(29.4)	9(26.5)	4.19	0.123
More then 1	27(26.0)	52(50.0)	25(24.0)		
Social media platform					
Facebook				3.31	0.173
Yes	38(29.0)	61(46.6)	32(24.4)		
No	4(57.1)	1(14.3)	2(28.6)		
Youtube					

Yes	41(31.5)	57(43.8)	32(24.6)	1.48	0.435
No	1(12.5)	5(62.5)	2(25.0)		
Tiktok					
Yes	20(26.7)	36(48.0)	19(25.3)	2.56	0.569
No	22(35.5)	25(40.3)	15(24.2)		
Whats app					
	15(30.6)	20(40.80	14(28.6)	0.76	0.685
Yes	15(30.6)	20(40.8)	14(28.6)		
No					
Messenger					
Yes	36(31.6)	55(48.2)	23(20.2)	11.93	0.018
No	6(27.3)	5(22.7)	11(50.0)		
Instagram					
Yes	2(28.6)	2(28.6)	3(42.9)	0.88	0.76
No	40(30.6)	60(45.8)	31(23.7)		
Purpose of use of social media					
Stay connected					
Yes	40(29.9)	61(45.5)	33(24.6)	61(45.5)	0.648
No	2(50.0)	1(25.0)	1(25.0)	40(29.9)	
Entertainment				0.18	0.90
Yes	30(31.6)	42(44.2)	23(24.2)		
No	12(27.9)	20(46.5)	11(25.6)		
Information				2.27	0.32
Yes	28(33.7)	33(39.8)	22(26.5)		
No	14(25.5)	29(52.7)	12(21.8)		

Table 6 shows Messenger use (p=0.018) is significantly associated with higher levels of loneliness. However, no significant associations were found with platforms like Facebook, YouTube, TikTok, WhatsApp, or the duration and purpose of social media use.

DISCUSSION

The present study found that a substantial proportion of older adults experienced high (44.9%) and very high (24.6%) levels of loneliness, indicating a considerable psychosocial burden. This finding aligns with previous studies conducted in Nepal, which reported moderate (38.7%) and severe (16.9%) loneliness among older adults.[5] Similarly, a study from Kathmandu documented that more than two-thirds of elderly individuals experienced some degree of loneliness[4], suggesting that loneliness is a persistent and contextually embedded issue in the Nepalese elderly population.[10,5]

However, when compared to international evidence, the prevalence observed in this study appears notably higher.[10,6]A global meta-analysis reported that approximately 25.9% of older adults experience moderate loneliness and only 7.9% experience severe loneliness[1], while overall global estimates suggest that about one in four older adults are affected.[1] This discrepancy may reflect contextual differences between Nepal and high-income settings. In Nepal, rapid out-migration of younger family members, changing family structures, and reduced intergenerational cohabitation may weaken traditional social support systems. Although most participants in this study lived in joint families, the persistence of loneliness suggests that structural family presence does not necessarily ensure emotional

connected ness, indicating a possible shift from functional to emotionally distant family relationships.

A key finding of this study is the significant association with Messenger use (p=0.018) has higher levels of loneliness. This finding contrasts with studies that report social media as a protective factor against loneliness through enhanced communication and perceived social support. [3,4]The contradiction may be explained by differences in engagement. In the present study population, social media use may be predominantly passive or limited to brief, task-oriented communication, particularly through Messenger, which may not provide meaningful emotional interaction. This supports emerging evidence that the quality rather than the quantity of online interaction determines psychosocial outcomes.[5]

Interestingly, despite the perception among most respondents that social media increases communication (98.6%) and reduces isolation (72.5%), loneliness remained highly prevalent. This inconsistency suggests a disconnect between perceived connectivity and actual emotional well-being. Similar findings have been reported in prior studies, where increased online interaction did not necessarily translate into reduced loneliness, highlighting that digital communication may fulfill informational needs without addressing emotional needs. [5,6] This indicates that perceived social connectedness may overestimate actual relational depth.

In contrast to several previous studies identifying socio-demographic factors such as age, sex, education, and ethnicity as determinants of loneliness.[7] The present study found no significant associations. This inconsistency may be due to the homogeneity of the sample and the overwhelming proportion of participants living in joint family systems, which may have minimized variability across socio-demographic groups. However, the continued high prevalence of loneliness despite these social structures suggests that emotional loneliness may be influenced more by relational quality and psychological factors than by demographic characteristics alone.

Similarly, no significant association was found between loneliness and duration or purpose of social media use, which differs from studies linking excessive or purposeless use with negative psychological outcomes.[5] This variation may reflect contextual differences in digital literacy, patterns of use, and the functional role of social media among older adults in Nepal, where platforms may primarily serve as communication tools rather than engagement or community-building spaces.

Despite near-universal access to mobile phones and internet services (99.3%), loneliness remained high, indicating that digital access alone is insufficient to address emotional and social needs. This finding reinforces the idea that technology can facilitate contact but cannot replace meaningful interpersonal relationships and emotional support systems.

The study's strengths include the use of a standardized and reliable measurement tool. However, the cross-sectional design limits causal interpretation, and the use of non-probability sampling from a single setting restricts generalizability. Additionally, reliance on self-reported data may introduce response bias, and the absence of qualitative exploration limits deeper understanding of lived experiences of loneliness and social media interaction patterns.

Overall, these findings suggest that interventions should move beyond increasing digital connectivity and instead focus on enhancing meaningful social engagement and emotional support. Future research should adopt longitudinal and mixed method designs to better explore the dynamic relationship between social media use and loneliness in older adults within the Nepalese sociocultural context.

CONCLUSION

The study concludes that a considerable proportion of older adults experienced high and very high levels of loneliness. Social media use, particularly Messenger use, was significantly associated with loneliness among older adults. However, no significant association was found

between loneliness and duration of social media use, other social media platforms, or purpose of social media use. These findings highlight the importance of understanding patterns of social media use among older adults and suggest the need for interventions aimed at promoting healthy social connections and reducing loneliness in this population. and exacerbating mental health issues. Therefore, it is essential to balance online and offline interactions to ensure the well-being of the elderly population.

REFERENCES

1. Schroyen S, et al. Loneliness and health outcomes in older adults: a meta-analysis. Aging Res Rev. 2023;85:101–115.
2. Ong AD, Uchino BN, Wethington E. Loneliness and health in older adults: a mini-review. Gerontology. 2016;62(4):443–449.
3. Victor CR, Bowling A. Loneliness among older people. J Psychol. 2012;146(3):313–331.
4. Chalise HN, Saito T, Takahashi M. Loneliness in Nepal. Geriatr Gerontol Int. 2007;7(2):115–120.
5. Devkota HR, Dahal R, et al. Loneliness among older adults in Nepal. Aging Ment Health. 2019;23(8):1013–1020.
6. Leist AK. Social media use of older adults. Gerontology. 2013;59(4):378–384.
7. Morris ME. social media and older adults. Health Informatics J. 2014;20(2):87–97.
8. Bonsaksen T, Schoultz M, Thygesen H. social media and loneliness. Int J Environ Res Public Health. 2020;17(8):2760.
9. Hajek A, König HH. Social media and loneliness systematic review. Gerontology. 2023;69(2):123–134.
10. Chopik WJ. Social technology and loneliness. Cyberpsychol Behav Soc Netw. 2016;19(9):551–556.
11. Lei L, Liu M, Wang X, Zhang Y, Ju S. Social media and loneliness: A meta-analysis. Comput Hum Behav. 2024 Apr; 145:107714. doi: 10.1016/j.chb.2023.107714.
12. Russell DW. UCLA Loneliness Scale validity and reliability. J Pers Assess. 1996;66(1):20–4