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Short Communication

Using Social Media in Response to COVID-19 Crisis in Health-Related Organizations in Iran: Short Communication

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Experiencing emotional states such as anxiety, feelings of loneliness, and uncertainty about COVID-19 may increase motivation to seek information from various sources in online social networks and media.¹ According to theories (uses and gratifications) and findings of studies, media satisfaction can be effective in forming or changing ideas and beliefs, as well as the type of response to a problem or crisis in such interactions.² Providing helpful resources including information and support from social media networks may protect people against stress.³ Uses and gratification theory research was chosen as a framework⁴ to gain a better perception of the factors influencing online communications (health-related behaviors) among Iranians working in health-related organizations during the COVID-19 pandemic.

The sample size of the study was collected by the quota-based method (stratified by age, gender, and educational level) via the cooperation of institutional coworkers from the five cities mentioned earlier. Two valid questionnaires were used to assess loneliness and mental well-being.^{5,6} A checklist and a reliable researcher-made questionnaire (Cronbach's $\alpha = 0.85$) validated by 10 experts were used to gather information about social network memberships, duration of communication with friends and relatives per week, activities, and online health-related behaviors people did on social media (ethical code: IR.BUMS.REC.1399.210).

Responses from 406 of 460 participants were included in this study for analysis and evaluation. The participants' mean age was 36.66 ± 9.33 years. Sixty-two percent of them were women, and 84% were married. Participants spent an average of 28.44 ± 21.5 (minimum = 0, maximum = 154) hours per week on social media. The average membership (number) in various media was 3.27 ± 1.6 , and they communicated with their friends and relatives for 12.18 ± 7.76 hours per day. Their score for online health-related behaviors was 15.33 ± 6.96 . The scores of loneliness, mental well-being, and online health-related behaviours during COVID-19 were significantly different from before the pandemic (Table 1).

Table 1.
Detailed Distribution of Changes in Online Activities Before and After the
Pandemic Among Participants.

	After				<i>P</i> value
	No	%	Yes	%	
Before					
q.4					
No	156	69.30	69	30.70	<.001
Yes	26	14.40	155	85.60	
q.5					
No	237	78.50	65	21.50	<.001
Yes	15	14.40	89	85.60	
q.6					
No	311	85.20	54	14.80	<.001
Yes	6	15	34	85	
q.7					
No	110	63.20	64	36.80	.007
Yes	36	16.20	186	83.80	
q.9					
No	150	78.50	41	21.50	.066
Yes	26	12.10	189	87.90	

q.4: video calling; q.5: shopping; q.6: contacting health care professionals; q.7: contacting relatives; q.9: receiving or submitting scientific content.

Furthermore, the predictors of online health-related behaviors have also been changed through COVID-19 time (Table 2). After COVID-19 prevalence, increasing age was associated with more engaging in online health-related behaviors ($b = 0.109$, $P = .001$), but men compared with women ($b = -1.53$, $P = .015$) and individuals having more loneliness had fewer behaviors than others ($b = -0.238$, $P = .057$).

Table 2.
Sociodemographic Predictors of Online Health-Related Behaviors Before and After the Pandemic.

Models	Dependent variables	Beta	SE	Test statistics	P value	
Model 1						
Before COVID-19 (multiple linear regression model)	Income (ref >6 m)	income. low.3 m	-3.022	0.841	-3.591	<.001
	Education (ref = experts)	Associate diploma	1.653	0.647	2.556	.011
		Master's	-1.078	0.638	-1.691	.092
Model 2						
After COVID-19 (multiple linear regression model)	Age		0.109	0.033	3.313	.001
	Sex (ref = male)		1.534	0.627	-2.445	.015
	Loneliness		-0.238	0.125	-1.906	.05
Model 3						
Before and after COVID-19 simultaneously (generalized estimating equation)	Sex (ref = male)		0.12	0.64	0.036	.85
	Income (ref >6 m)	income. low.3 m	-2.57	1.39	3.43	.064
		income. low.3-5 m	-2.63	1.12	5.50	.02
	Loneliness		0.25	0.13	3.65	.05
	COVID-19 duration		2.317	0.3134	54.64	<.001

Finally, assessing changes in online engagement for health-related behaviors simultaneously during the time (before and after COVID-19), more behaviors were found among women than among men. Also, increasing loneliness was significantly associated with social media engagement ($b = 0.25$, $P = .05$). The incidence of the pandemic has created significant changes (2.32 times) in media consumption and online behaviors compared with before the pandemic ($P < .001$).

According to our findings, online activities and health-related behaviors increased during the pandemic compared with before the crisis. This aligns with the previous investigation that intrapersonal needs and differences could drive their preferences for media selection. Intrapersonal cognition and perception about the condition could affect coping strategy, for example, more prevalence of seeking out information or social support for relieving stress among women and older people.^{7,8}

Individuals select the type of media, content, and online communications based on their needs, social roles, and circumstances to cope with critical

situations. Policymakers could train people as a social resource for sharing correct and sure information within networks in health crises.

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Author Contributions

Mozhgan Moshtagh helped with conceptualization, project administration, methodology, writing—original draft, and writing—review and editing. Fatemeh Salmani helped in methodology, formal analysis, and writing—the original draft. Mitra Moodi helped in project administration. Rana Amiri helped with writing—reviewing and editing.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Ethical Approval

The current research has been conducted in accordance with the World Medical Association's Declaration of Helsinki. The study was reviewed and approved by the Review Board in Birjand University of Medical Sciences (ethical code: IR.BUMS.REC.1399.210).

Informed Consent

Informed written consent was obtained from all participants.

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Data Availability Statement

Data sets are available on request: The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

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