

Public perceptions of the perils of misinformation in pandemic

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Objective: To investigate the public perception regarding to the perils of misinformation in pandemic.

Methodology: This quantitative cross-sectional design study with convenient sampling techniques was conducted in the IAHS, UAJ&K in March to April 2020 after ethical approval. Sample with both genders, using any types of social media between 15 to 65 years of ages was selected. Those who used social media for 2 years were included in the study, while new social media users were excluded. The data were collected from online survey with structural questionnaire and was analyzed on SPSS version 21.

Results: Out of 229 participants, 107(46%) said that pandemic was due to punishment from God. Some thought it resulted from some sort of human

negligence (N=40, 17%), and a few of them said it's a man-made biological weapon (N=15, 6%). The participants had physical (N=17, 7%), social (N=66, 28%), economical (N=67, 29%), and mental (N=35, 15%) issues due to pandemic. To avoid the misinformation majority respondent decided to Stop posting/sharing (N=99, 53%) provide or share authentic information (N=97, 42%), motivate other (N=94, 41%) and delete/report misinformation (N=65, 25%).

Conclusion: Misinformation leads to panic attack, sleep disturbance and develop mistrust. So it is important to arrange awareness campaigns for public on the issue of detrimental effects of misinformation. (Rawal Med J 202;46:257-261).

Keywords: Misinformation, Covid, perceptions.

INTRODUCTION

A pandemic is a disease outbreak that has occurred through a wide area, for example, several continents or across the globe, involving a huge number of citizens.¹ The COVID-19 pandemic has contributed to conspiracy theories and misinformation on the cause, size, and detection, diagnosis, and treatment of the disease. False knowledge, including intentional disinformation, has been disseminated via social media, text messages, and mainstream media.² Examples of this are false rumors, threats and pranks, while examples of more deliberate disinformation include malicious content such as hoaxes, spear phishing and digital propaganda.² The effect is increased fear and suspicion among the general population.³

The words "misinformation" and "disinformation" have also been synonymous with "false news" neologism, described by some scholars as

"fabricated information imitating news media content in type, but not in organizational process or intent."⁴ The key distinction between misinformation and disinformation is that misinformation is mistakenly spread when disinformation is intentionally transmitted.⁵ The precise communication and inspiration for why disinformation spreads so quickly across social media remains unknown.³

The proliferation of knowledge outlets renders the reader's job of assessing knowledge credibility more difficult, compounded by the untrustworthy social indications that go with these details.⁶ Some writers argue that the result is a dearth, and worst, some writers argue that there is no universal truth.⁷ While social networking platforms have modified their algorithms to deter the dissemination of false news, the issue still exists.⁸ Whilst people might recognize what the science community has proven

to be real, they can also fail to acknowledge it as such.⁹ Misinformation that is introduced through a social format influences individuals drastically more than misinformation delivered non-socially.^{10,11} Regarding to misinformation no such study has been carried out in Azad Jammu and Kashmir which determine the public opinion regarding pandemic. The aim of the study was to investigate the public perception regarding to Covid pandemic.

METHODOLOGY

The quantitative cross-sectional design and convenient sampling techniques used in this study and it was conducted in the Institute of Allied Health Science University of Azad Jammu Kashmir in March to April 2020 after ethical approval. We included 229 subjects of both gender using any types of social media between 15 to 65 years of ages and those who used social media for at least 2 years. New social media user was excluded.

The collection of data was done by an online survey form after obtaining consent from participants. The form consisted of structural questionnaire with demographic details, nature, source of misinformation and its impact and how to prevent misinformation.

Statistical Analysis: All data analysis was performed using SPSS Statistics 23.

RESULTS

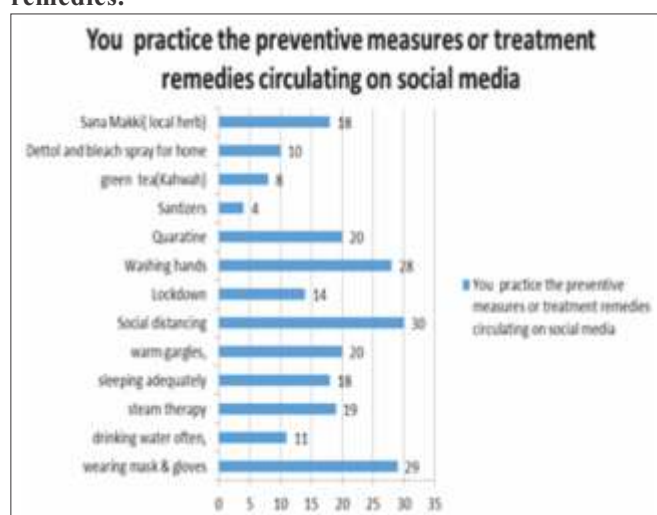
Majority of the females participated in this study with a greater proportion of well-educated people. The age of the participants was between 15 to 35 years. We found that 99% of the participants had heard of Covid 19 (Table 1). Most of them did not know which information is authentic, they just provide information to earn money and for becoming famous, they think if they use this kind of information they will get fame and money.

Table 1. Variable related to misinformation.

Variable		Frequency
Gender	Female	158
	Male	71
Age	15-25 year	185
	26-35 year	36
	36-45 year	3
	46-55 year	4
	56-65 year	1
Source of information	Hospital	2
	Internet	30
	WHO	9
	Community members	27
	News paper	3
	Social media	93
	Television	65
Person providing information of virus	researcher	3
	Who	66
	Media anchor	68
	Some faith healer	8
	Religious scholar	10
	Medical doctor	74
Social media mostly used	Snap chat	8
	Linked In	10
	YouTube	18
	Twitter	42
	Whats App	90
	Facebook	37
	TicTok	4
	Instagram	20
In your opinion Pandemic is due to	Mental sickness of so called	9
	5g	6
	Intentional human negligence	2
	Biological weapon	15
	Non intentional human negligence	40
	Punishment from god	107
	Don't know	50
type of information about Covid 19 you get mostly	Nature of virus	1
	Its disastrous effects	108
	Prevention of spread of infection	164
	Treatment of corona infection	39

Table 2. Impact and prevention.

Impact and prevention variable		Frequency
I forward the information I get, to my friends and family.	Yes	214
	No	15
I would not have followed the social distancing if these disturbing figures would not have reached me.	Agree	142
	Disagree	87
Many times it happened that information on social media was later proved to be fake or contrary to the facts.	Agree	193
	Disagree	36
In the beginning I trusted the information regarding statistics, treatment and prevention of covid-19 infection.	Agree	207
	Disagree	22
I often had panic attacks and sleep disturbance after being stuffed by the information regarding death rate and infection rate of covid -19.	Agree	88
	Disagree	141
Now whatever new information I come across, I look upon that with some degree of mistrust.	Agree	158
	Disagree	71
You faced any of the following issues during pandemic.	Physical	17
	Social	66
	Economical	67
	Mental	35
	None	91
HOW to prevent misinformation regarding pandemic they decided	Tickle the situation	1
	Only provide authentic information	97
	Stop posting /sharing non authentic information	99
	Motivate other not to post /share non authentic information	94
	Delete the misleading information	65

Fig. Practice the different preventive/treatment remedies.

Considerable number of participants had panic attacks and sleep disturbances due to misinformation. The participants had mental (N=35,15%), physical (N=17,7%), social (N=66,28%) and economical (N=67,29%) issues due to misinformation regarding pandemic (Table 2). We found that they (N=207,90%) trusted the information regarding statistics, treatment and prevention of Covid-19 infection obtained from different sources of social media (Fig.).

DISCUSSION

This study was conducted in the early pandemic era of Covid-19. A study conducted by Rosenberg et al showed that the misinformation was very common on social media and due to its popularity; it is very

difficult to stop from spreading on social media.¹² There is a need for a proper system of check and balance of the genuineness stuff as this pandemic was appropriately regarded as "infodemic" by WHO.^{13,14} Previous studies have showed similar findings that due to pandemic most of participants had developed psychological problem like stress anxiety depression and sleep disturbance.^{15,16} This develop physical, economical and social impact on the life of a person.^{17,18}

Majority of the participants practiced preventive and management measures which have no scientific evidence e.g. drinking plenty of water, warm gargles Sana makki, green tea, steam therapy and sleeping more than normal. The recent studies results showed that the home remedies help in boosting immune system, reduced stress and alleviating the covid symptom.^{5,6,11} The individuals seek only accurate information and propagate it easier to combat the misinformation as WHO provides strategies for preventing misinformation.¹⁰

Legislation should be done by the state to charge the individuals who spread the falsehood or disinformation during a pandemic and right of broadcasting information should be carefully confined to the state's authorized institutions, consisting of team of informed professionals from the relevant domains, during a pandemic.

This study has limitations. Sample size was small as it conducted in a small group of people. Information regarding the degree of trust to vaccines, the effect of home remedies, was missed so future studies should be carried out, different strategies developed how the trust regarding to pandemic misinformation will be reestablished and how misinformation will be controlled.

CONCLUSION

Misinformation leads to panic attack, sleep disturbance and people develop mistrust. So it is important to arrange awareness campaigns for public on the issue of detrimental effects of misinformation and propagate authentic information during a pandemic through social media, talk shows, seminars and awareness walk

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