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# Prevalence of misinformation among nomads of Jammu and Kashmir: An understanding of myths and misconceptions about COVID-19 pandemic

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**Abstract**---Background: Nomadic pastoralists are considered predominantly at the risk of being severely affected by their false beliefs and myths in Jammu and Kashmir. These myths, beliefs and misconceptions are deeply rooted in their pastoral lifestyle and culture fabric that make them distinct from settled communities. Prevalence of misinformation among the nomads of Jammu and Kashmir, surrounding their healthcare practices is recognizable, yet very little is known about their practicing myths, misbeliefs and misconception regarding Covid-19 pandemic. So there is dearth of knowledge about embedded misinformation based on myths and misbeliefs during the ongoing pandemic in nomadic pastoralists of Jammu and Kashmir (J&K). Methodology: The study employed a mixed methodological framework to achieve the objectives of this study. In the quantitative method, the survey with a researchers-guided questionnaire has been used for the collection of data while in qualitative, semi-structured interview was conducted. For quantitative approach, 129 respondents were randomly selected at 10 random location of Jammu and Kashmir and 30 respondents were chosen for semi-structured interviews respectively. Conclusion: Through this study it has become evident that deeply ingrained myths and misconceptions solidify their false beliefs and also play a vital role in the spreading of misinformation. The study found nomadic pastoralists of J&K strongly believe that getting COVID-19 is a part of God's plan or punishment for past sins. The study disclosed many factors that intensify the misinformation in nomadic pastoralists of J&K like challenge of access to basic healthcare due to topographical difference, socio-economic factors, high cost of transportation and discrimination. The precautions and hygiene practices recommended for preventing the spread of Covid-19 virus established no compatibility with their traditional way of life. Limitations: This study is limited to nomadic pastoralists of Jammu and Kashmir with respect to Covid-19 exclusively. The study is restricted to 30 semi structured interviews because of the dispersive nature of the population which made it difficult to access them as they are on continuous move.

**Keywords---**misinformation, myths, beliefs, nomadic pastoralists, COVID-19, Jammu and Kashmir.

#### Introduction

The COVID-19 pandemic which emerged from China has caused an unprecedented global health crisis (Muralidar et al., 2020). With World Health Organisation declaring Covid-19 as a global Pandemic (Cucinotta & Vanelli, 2020), the challenge ahead is not only to curtail the transmission of virus, but also to propagate reliable and trustworthy information amidst the ongoing pandemic (Barua et al., 2020). While this pandemic has triggered fear (Aghababaeian et al., 2020a) and raised concerns about health (MD & Newman, 2021), it has also brought to the forefront an equally pernicious phenomenon - the widespread diffusion of false information about the virus (Starbird & West, 2020) coupled with high levels of myths (Reddy et al., 2020). Consequently, these fallacies have a resounding impact on the public's behaviour, responses and their adherence to health guidelines (Kricorian et al., 2021; Islam et al., 2020), rendering them vulnerable to develop more infection (Sahoo et al., 2020) eventually resulting in fatalities due to their perceived false beliefs (Aljazeera, 2020; Aghababaeian et al., 2020b).

Given that the disparities in health communication exist with people at the upper end of socioeconomic spectrum receiving information more promptly in comparison to the marginalized populations (Viswanath et al., 2020), these informed societies still couldn't escape the myths surrounding covid-19 (Undela et al., 2020). Take for example the findings of the (Kalichman et al., 2021) study which examined the amount of trust between the US government and the information disseminated about Covid-19. Conclusions drawn from this study reveal that 40% of the participants, despite having serious covid-19 symptoms, were ill informed about preventive measures to contain the disease. This rapid spread of false information as understood by (Ferreira Caceres et al., 2022) is a parallel pandemic as it played a significant role in fostering people's complacent approach in response to the current crisis. These findings also align with the outcomes of (Bitar et al., 2021) whose study affirms that covid-19 vaccine hesitancy is strongly, reciprocally related to misinformation among people. Among the groups who are predominantly at the risk of being severely affected by these false beliefs and myths resulting from misinformation are the nomads of Jammu and Kashmir. They don't have access to basic healthcare facilities (Ganie et al., 2020) and because of their pastoral lifestyle, they are being neglected with respect to health care initiatives (Verma et al., 2019). These communities, due to their distinctive ethnicities and limited access to information, significantly impact their understanding and response to the COVID-19 pandemic diversely. Consequently,

exploring the prevalence and nature of misbeliefs and misinformation in these groups is crucial to understand to what extent they harbour the myths and misconceptions about the Covid-19 disease. Although the available literature on the subject under study is limited, still the existing material proposes that the nomadic pastoralists of Jammu and Kashmir have deep rooted misconceptions regarding their overall health. Therefore, given that no such research that examines the prevalence of misinformation among nomads of Jammu and Kashmir has been undertaken, the significance of this research becomes profound as it seeks to identify the specific myths and misconceptions related to COVID-19 among the nomadic communities of Jammu and Kashmir.

For example, a report from (Al Jazeera, 2021), signifies that the principal hindrance in vaccinating the nomads of Jammu and Kashmir is the prevalence of misinformation, mistrust and deep-rooted false beliefs about the vaccines. These mistaken beliefs have led them to believe that they are immune to the covid-19 thus making vaccination campaigns a challenging task. Another reinforcing factor for their misbelief is the untimely access to medicines during their illness. Studies show that one of the primary reasons for delayed medication is the long distance and as noted by (Wulifan et al., 2022), it may take them up to 3 to 4 days to reach health care facility centres because of challenging treks during medical emergencies. Due to difficult terrains, high transportation costs and restricted access to timely medicines, their belief of surviving without conventional medication gets reinforced. This reluctance stance towards medication and vaccination is manifested further during a crisis like covid-19 vaccination. And as a consequence, they rely heavily on indigenous remedies like herbs and shrubs whenever they feel sick (Verma et al., 2019). A general conclusion from the study of Yadav et al. (2000) reported similar findings about the tribal communities of Satpura region who solely rely on traditional remedies because of limited medical facilities. In addition to the above mentioned hindrances, (Sangare et al., 2021) found that the nomads of Mali had a strong adherence to traditional beliefs, stemming from misconceptions and grounded in unscientific beliefs, also acts as a barrier in their utilization of healthcare facilities. A study conducted by Sheik-Mohamed & Velema, 1999) noted that, apart from the apparent obstacles as mentioned above, cultural and political disparities between nomads and health care workers also pose challenges in providing health care services to nomads. The authors citing (Imperato, 1975) and (Selden, 1968) understand, that due to higher fuel expenses and additional staff required, the costs of healthcare for nomads is 11 times greater than the settled populations. As a result, they not only remain one of the most underserved populations regarding assessing health services, but also what (Wild et al., 2020) recognizes them as 'the last population on the earth to be reached by health services'.

The partial access and disconnection between health care facilities and transhumance people results in lack of health awareness among nomadic pastoralists. Due to limited access to health services, nomadic communities experience limited exposure to health-related information. This restricted access not only compels them to turn to traditional practices during sickness but also contributes to their lack of awareness about vital health practices, inevitably, resulting in the emergence of misconceptions, myths and primitive beliefs within the pastoral communities. Findings from a study by (Yousuf et al., 2020) on

nomadic populations, infer that lack of treatment awareness and the prevalence of misbeliefs and misconceptions significantly contribute to their poor healthcare. And with Covid-19 in the backdrop, the surge in misinformation becomes even more perilous thus labelling this surge in misleading information as a secondary pandemic, called as 'Infodemic' (Call for Action, 2020).

The observations of (Ali et al., 2021) also align with our understanding that amidst the ongoing pandemic, misinformation is more prominent. A Similar study to understand how misconceptions and myths prevail in Ghana, (Tabong & Segtub, 2021) observed that widespread myths such as the belief that wearing masks can result in collapsing or that hot climate resists virus spread along with the news that herbal supplements produced in Africa can control spread of the coronavirus, hindered the efforts of authorities in Ghana to control the spread of infection. Another parallel investigation executed by (Osuagwu et al., 2021) also validated that false information thwarted the virus control. The study reveals that people had a belief that consuming hot water can control the virus or holding the breath for ten seconds indicates no virus and that the coronavirus has been engineered by some powerful nations to control the world population. This spread of misinformation fostered scepticism towards the government-approved medicines in combat the virus and inevitably led to the proliferation of myths and misconceptions, thus rendering people more susceptible to disease.

#### Review of literature

In the present era of speedy communication owing to technological advancement, easy access to information has become vital for the survival of individuals throughout the globe. However, for a large number of people, across the globe, this ease of access to information which paves way to effective communication is still an elusive aspiration. Nevertheless, one specific community affected by this communication disparity, especially in a health crisis like Covid-19 has been the Nomads of Jammu and Kashmir. The lack of trustworthy channels to disseminate timely and reliable information carries profound implications, particularly during a health crisis like Covid-19. This study identifies and explains the intricate problems faced by nomads of Jammu and Kashmir with respect to information accessibility and preventive measures adopted by nomads of Jammu and Kashmir and its consequences on the health and well-being of them during the covid-19.

The United Nations in its report, The Impact of COVID-19 on Indigenous Peoples, (2020) recognizes that Indigenous people across the globe are the most vulnerable people in terms of health risks. The report reflects that, with the outbreak of an epidemic like Covid-19, the severity of this already existing health risk crisis escalates. Additionally, the stereotyping of tribal communities in terms of ostracism and discrimination in health care facilities has developed a sense of discouragement among tribals across the globe. This has been a deterrent factor in seeking essential health care information. This marginalization against the tribals as understood by (Power et al., 2020) is also manifested in their work conducted to demonstrate the determinants that have significant impact on the health behaviour of tribals globally. The study emphasizes that inequality, due to discrimination and marginalization experienced by these tribals during the Covid-19 crisis has affected their health and well-being drastically. The study suggests

that for more than 370 million indigenous people living across the globe, the health disparity has not only helped in exposing them to more vulnerable diseases but also left them under-resourced to respond to a health emergency like Covid-19. In a similar tone, (Sheik-Mohamed & Velema, 1999) affirm that disparity in healthcare between nomads and general population stem not only because of socio-political barriers but also due to consolidation of healthcare services in settled populations. However, a report by World Bank (Improving Health Services for Tribal Populations, 2012) reflects that apart from other contributing factors which indicate the worse healthcare among tribals, lack of awareness among these nomads concerning the measures to protect their overall health further exacerbates their condition. Coping with a pandemic like Covid-19 demanded an effective information mechanism to reach out to the nomads residing in the peripheries where the means of communication are limited as compared to urban areas of the state. This observation was also documented by (Kasi & Saha, 2021) who advocate that because of the lack of awareness, the disparity is exceeding in healthcare infrastructure among tribals of India. Moreover, lack of coordination between the medical facilities and state machinery led to poor results of health initiatives proposed by the government of India concerning healthcare of tribal people thus pushing them to margins. A thematic paper, (the health of indigenous peoples, 2014) by The United Nations Inter-Agency support group (IASG), recognizes that access to health care with information accessibility at its core, is essential. The study emphasizes that apart from limited access to health information, the prevalence of racism and discrimination against the indigenous communities' present substantial hurdles in accessing healthcare. Additionally, linguistic barriers, culminating in poor communication between healthcare providers and those who benefit from it, also hampers their access to healthcare.

To address this growing health disparity, (P et al., 2022) contended that health literacy needs to be improved among the tribals in order to enhance their overall health. It is also pertinent to mention that, besides the already mentioned impediments that contribute to the challenges of delivering efficient health care to pastorals of Jammu and Kashmir, poverty, lifestyle and gender based disparities have substantial impact on the overall health understanding of nomads as well. (Sangare et al., 2021) observed that in addition to socio-economic status and gender bias, the hurdles to access the community based health interventions adopted by the government of Mali result in poor healthcare provisions for the pastorals of Mali. These findings align with the observations of (Wild et al., 2020) who deduced that, in terms of health services, mobile pastoralists are what they call 'last groups on the earth to be reached', strongly implying that, indigenous people are the most marginalized groups worldwide.

# Methodology

The study employed a mixed methodological framework to achieve the purpose of this study. Therefore, the study used quantitative and qualitative methods. In the quantitative method, the survey with a researchers-guided questionnaire has been used for the collection of data as of reason surveys are easy, efficient, and versatile methods used across a broad range of social settings and communication contexts (Schutt, 2015). In the qualitative method, as to the complexity of the issue to be addressed in this study, semi-structured interviews

were conducted to ascertain more detailed information and to rationalize the quantitative results.

The survey comprised a close-ended and interviewer-administered questionnaire to quantify the beliefs and misconceptions among nomadic pastoralists during the Covid-19 pandemic. The study surveyed nomads at multiple places in Jammu and Kashmir (J&K) as they are the primary focus of this study. By using a coding sheet for the data, the quantitative information has been interpreted by SPSS software and qualitatively evaluated manually in detail.

# Sample and Sampling

This research focused on nomadic pastoralists living in J&K. A purposive sampling technique was used to select respondents in order to ensure a representative sample. In order to gather quantitative data more accurately, 129 respondents (n=129) were carefully selected based on the size of the pastoralist population in J&K. A total of 30 semi structured interviews were conducted to complement the quantitative findings. These interviews provide valuable insights into various aspects of covid-19 awareness among this specific population group. The data was analysed based on four prominent themes arising from the responses collected both quantitatively and qualitatively: "Belief, myths and misconception on covid-19 virus" "Health Interventions and allied beliefs of nomadic pastoralists" "Beliefs and myths about traditional practices for covid-19 virus" and "Factors that shape nomads perception about Covid-19 virus". This categorization aided in gaining a comprehensive understanding of pastoralists' perceptions and responses to COVID-19.

# Research objectives of the study

- R.O. 1: To identify the prevalence of myths, misbeliefs and misconceptions regarding Covid-19 pandemic among the nomadic pastoralists
- R.O. 2: To trace out the factors that affects the trust on reliable Covid-19 pandemic information in the nomads of Jammu and Kashmir
- R.O. 3: To find out the reasons that strengthen the Nomadic health belief system which is contrary to the accurate information about the Covid-19 pandemic?

# Research Questions of the Study

- R.Q. 1: What are the most common dominant myths, beliefs, and misconceptions that customize misinformation about COVID-19 in nomadic pastoralists of Jammu and Kashmir?
- R.Q. 3: What are the factors that make nomadic pastoralists to firmly trust on traditional beliefs and turn away from officially authenticated information?

## **Analysis**

# Theme I: Belief, myths and misconception on covid-19 virus

Table 1.1

S.NO	Item Statement	Mean	S.D	Weighted Mean
A	Do you believe that Covid-19 is a serious public health concern?	4.1163	1.07258	4.20
В	Do you think that Covid-19 cannot affect healthy people?	4.2868	0.96981	4.20
$\overline{C}$	Do you believe that covid-19 pandemic disturbs your connection with nature and hence turns you sceptical about following advice related to it?	4.1550	1.18222	4.20
D	Do you trust that Covid-19 is a phenomenon of settled societies and doesn't apply to you due to your unique, conventional lifestyle?	4.2248	1.05505	4.20
$\overline{E}$	Due to your lifestyle, are you of the belief that you have the natural tendency against the Covid-19 virus?	4.3643	0.75971	4.20
$\overline{F}$	Do you think that the community's seclusion makes it unlikely for you to contract Covid-19?	4.3643	1.22593	4.20

Under the theme I, the statistics of table 1.1 shows less opinions about Covid-19 virus as a serious health threat among nomads in J&K as majority of them agreed that Covid-19 cannot affect them adversely. For example, one of the respondents stated that,

We don't take Covid-19 seriously. For us it is similar to other common illnesses like cold and fever and it hasn't affected us.

The majority of nomadic respondents agreed that Covid-19 exists only in settled societies and their unique conventional lifestyle helps them to resist diseases. They strongly agree that they have inbuilt tendencies against the Covid-19 virus. However, they also agree that their community seclusion makes them unlikely to contract Covid-19 virus. For example, another respondent reveals,

"The reason for getting minutely exposed to covid-19 virus is obvious; our life spins around continuous walking over highland pastures, resting in small shanties that segregate us from settled or urban societies where maximum covid19 cases are found and deaths reported.

# Theme II: Health Interventions and allied beliefs of nomadic pastoralists

Table 2.1

S.NO	Item Statement	Mean	S.D	Weighted Mean
G	Do you trust traditional healer's more than	4.069	1.28808	2.70
	modern medicine for treating COVID-19 symptoms?	8		3.72
H	According to you, is the information provided by	3.782	1.28808	
	healthcare professionals about the COVID-19	9		3.72
	virus and vaccine confusing or insufficient?			
I	Do you believe that getting Covid-19 vaccine	4.046	1.28808	3.72
	induces potential risks owing to rumours	5		
	surrounding it?			
J	Do you feel underscored by the health system	4.131	1.28808	3.72
	because of your ethnicity, thus influencing your	8		
	views on the COVID-19 vaccine?			
K	Do you believe that COVID-19 is a government	2.565	1.288 08	3.72
	conspiracy?	9		

The statistical analysis of theme II, table 2.1 manifests that the nomads of J&K have a strong belief in traditional healer's more than modern treatment of COVID-19 symptoms. The majority of them believe the information about Covid-19 pandemic and vaccination is confusing or insufficient. In response to rumours surrounding Covid-19 vaccine, the nomads agree that it carries risks. However, they feel underscored by the health system because of their ethnicity. Most of them hold the belief that their views on the COVID-19 vaccine have been shaped by the discriminatory treatment they receive at the hands of health workers during health emergencies. Although, there is no consensus among respondents concerning whether COVID-19 is a government conspiracy yet their responses validate that Covid-19 is an ordinary ailment driven by conspiracy theories.

Take for example the response of a female member of the community,

"Whenever we have a medical emergency over long distances on high terrains, we rely strongly on traditional healers and herbs because to avail timely modern medical aid is not possible." Similarly another respondent illustrates the issue with combining underlying causes,

"The ethnic based discrimination, cultural difference and dialect used usually deter us from understanding the information propagated by health workers. So is the case in this pandemic. Information disillusion set in fear in our community resulting in vaccine hesitancy."

Theme III: Beliefs and myths about traditional practices for covid-19 virus

Table 3.1

S.NO	Item Statement	Mean	S.D	Weighted Mean
L	Do you believe that home-made remedies can cure COVID-19?	4.0543	1.21392	4.0543
M	Do you perceive that COVID-19 can be cured by drinking goat milk?	4.0543	1.01300	4.0543

The statistics under theme III, table 3.1 indicate that most nomads in J&K believe that home-made remedies are more precise to treat the Covid-19 virus. They trust that drinking goat milk boosts their immunity and protects them from getting infected by Covid-19 virus or any other disease. Most of the respondents firmly believed that goats are their saviours during sickness.

"We usually drink goat milk as our goats consume different forest herbs that make their milk an immune booster for us. This is the reason we got less infected so far by Covid-19 virus."

The study demonstrated that their myths, primitive beliefs and misconceptions are so intertwined that it becomes a challenge to encourage them to embrace modern scientific interventions.

"The herbs and shrubs found in forests have the ability to control any illness. Besides some homemade remedies like drinking Kehwa and tea made up of different forest herbs boosts our immune system."

Theme IV: Factors that shape nomads perception about Covid-19 virus

Table 4.1

S.NO	Item Statement	Mean	S.D	Weighted Mean
N	Do you believe your limited access to healthcare facilities makes it difficult for you to get vaccinated?	4.1550	1.12117	3.97
0	Do you believe gathering information about COVID-19 is challenging due to your frequent movement?	4.2016	1.08527	3.97
P	Do you believe that precautions and hygiene practices recommended for COVID-19 are not aligned with your close-to-nature lifestyle?	4.2016	1.01842	3.97
Q	Do you believe that getting COVID-19 is a part of God's plan or punishment for past sins?	4.3333	.75346	3.97

R	Do you think exposure to nature makes your immunity stronger in comparison to the COVID-19 vaccine to combat the infection?	4.3411	1.04205	3.97
S	Is it true that the conventional setup of your community discourages the adaptation of modern healthcare measures?	2.5969	1.38361	3.97

The statistics data under theme IV of table 4.1 shows nomads of J&K have limited access to healthcare facilities owing to distant geographies and arduous treks, leaving them to rely on faith healers and natural remedies during sickness. This dependence on traditional remedies and faith healers not only manifests their limited choices but also cements their misbeliefs. This solidifying of beliefs perpetuates a cycle of misconceptions that makes them reluctant towards scientifically proven medical interventions.

"Travelling to nearest health care facilities during illness is a difficult task. Since we don't perceive Covid-19 as a threat, we avoided availing healthcare facilities, even if it was available."

It was observed that their nomadic lifestyle made it challenging to vaccinate them due to their frequent movements. Besides, they strongly believe that the precautions and hygiene practices suggested for prevention of COVID-19 virus are not aligned with their close-to-nature lifestyle. For example one respondent while showing affinity for the nature states,

"We have the nature to save us from all diseases. Why to take vaccination unnecessarily when you are an inhabitant of such a natural environment."

Apart from their various unjustified fallacies that significantly contribute to their hesitancy in adopting the preventive measures, they firmly believe that coronavirus is a punishment inflicted upon humans from God for our immoral acts

They also acknowledged that their conventional setup discourages the adaptation of modern healthcare measures. For example, another respondent said,

"Whatever happens is God's plan and punishment to us for past sins."

# Qualitative analysis

To substantiate the results derived from the quantitative data based on four themes, an additional 30 interviews were also carried out among the nomadic pastoralists hailing from different regions of the Jammu and Kashmir. Their responses were documented and subsequently transcribed manually in text format. The intersection of old beliefs resulting in reluctance to embrace modern health interventions was a recurrent theme revealed through interviews. Nomadic communities who usually dwell in isolated and challenging geographies were at the crossroads of modern health science and their deep ingrained beliefs. As a result, preventive measures to combat Covid-19 infection, such as wearing masks, vaccination, quarantine, and sanitization were encountered with suspicion and resistance. Majority of the respondents hold contradictory and conflicting beliefs against the advices of modern health experts regarding the

pandemic precautions. Such pervasive are the deep-seated false beliefs among them that that most of them even rejected to recognize Covid-19 as a disease, set aside admitting it as a health threat. When asked how they perceive Covid-19, the respondents who identified it with a 'Normal Flu' were at the higher side with very few recognizing it as deadly pandemic. Most of the respondents perceived Covid-19 as a divine retribution and believed that traditional remedies offer protection against it.

"The arrival of Covid-19 is God's will and it emerged only as a punishment to our past sins." Says, Mohd. Amin Chaudhary.

The results of this study establish that, health literacy disparities exist among the respondents as their responses were coloured by misbeliefs and myths. For example, in response to what precautions they adopted to safeguard themselves from the virus, those who favoured taking wild herbs and shrubs outnumbered those who believed in medical science to cure the virus. Majority of the respondents had a firm belief that consuming Goat milk is the best way to combat not only the Coronavirus but other diseases as well.

"During highland pastures, we consume herbs as vegetables which eliminate hundreds of diseases from us. Further we drink goat milk, which is the best remedy to get an antidote for any disease because we graze them in green pastures where they eat grass and herbs. "Says, Sher Mohammad.

It was intriguing to observe that most of the respondents had scepticism towards coronavirus vaccine as those favouring the vaccine were fairly less compared to those who opposed it. They believed Covid-19 vaccine is unsafe and viewed it as is a "conspiracy" to control the population and a tool to 'induce infertility' among the people. Even most of those who got vaccinated affirmed that they did it only because they adhere to the laws of the land.

"We run away in fear of getting harmed by taking vaccines. We drink two cups of goat milk or Jagger tea (goad chai) that is enough to kill any disease." Says, Fakhirud-din.

"I took Covid-19 vaccine out of Government compulsion, resisting it might summon the wrath of authorities in future". (Name withheld)

Apart from vaccine hesitancy, respondents when asked about how they adhered to Covid-19 safety measures like wearing masks responded in a positive way. Wearing masks was the most prominent safety measure adopted by them however, with respect to social distancing, majority of espoused a negative approach.

Although most of the respondents cite the radio as the most vital source of information during the pandemic especially among women and elders, and very few others preferred internet over phone as a channel of information. The reasons are evident; internet penetration is almost nil in high mountainous treks thus hindering them to have access to timely information. This in turn contributes significantly to further the gaps in understanding the pandemic's intricacies and to adopt the most effective preventive measures to contain the virus.

Attributing their compliance solely to the radio, one of the respondents said that 'Do ghaz Dhoori mask hai zaroori' played on radio motivated them to wear masks, overlooking other protocols because they lacked prominence.

On asking did they encountered any deterrents in seeking preventive measures about Covid-19, most of them responded that they face discrimination at the

hands of healthcare workers and medical professionals with very few opposing this perception.

When we visit a hospital for any health emergency, doctors do not treat us well. They do not value us. This not only happens once or twice, it occurred umpteen times to us." Says, Mohd. Sager. Though this might not be true always but this perception is prevalent among them.

## Results

After analysing the collected data, the study found that the pastoralists strongly believe that getting COVID-19 is a part of God's plan or a punishment to past sins and their conventional setup of community discourages the adaptation of modern healthcare measures.

- 1. The study found that nomadic communities strongly believe in traditional healers, herbs and goat milk more than modern medicine to treat COVID-19 symptoms.
- 2. The study has found that majority of nomadic pastoralists believe that COVID-19 pandemic is the phenomenon for settled societies and do not pertain to their unique conventional lifestyle.
- 3. Majority of nomadic pastoralists also found in this study believing that they possess inherent resistance to the virus and also their community's seclusion reduces their more chances of contracting COVID-19 infection.
- 4. The study has found that nomadic pastoralists of J&K do not believe Covid-19 as a significant health threat to them and they are firmly believed that healthy individuals are unlikely to be adversely affected by the virus.
- 5. The majority of respondents in this study found covid-19 information confusing and unsatisfactory that affects their covid-19 related decisions.
- 6. The study also found the reluctance among nomadic pastoralists while taking covid-19 vaccine and found agreement that it carries risks.
- 7. However, the study also reveals nomadic pastoralists feel underscored by the health system because of their ethnicity that shapes their decision with regards to COVID-19 precautions.
- 8. The study found the frequent moves of nomadic pastoralists makes it difficult for them to access basic healthcare facilities.
- 9. The study found that because of tough terrains, socio-economic factors and costly transportation makes it difficult for them to avail basic health facilities, even during a health crisis.
- 10. The study reveals that nomadic pastoralists admit that the precautions and hygiene practices suggested for prevention of COVID-19 virus are not aligned with their close-to-nature lifestyle.

## Conclusion

The staunch belief in myths and misconception in some communities often contribute to the propagation of misinformation (Stern & Judy, 2017). In light of this study conducted among the nomadic pastoralists of Jammu and Kashmir, it has become ever more apparent that ingrained myths and misconceptions solidify their false beliefs and also play a vital role in perpetuating misinformation. Getting COVID-19 is a part of God's plan or punishment for past sins. Even to

treat life threatening diseases, they firmly believe in traditional healers, herbs and goat milk as the preferred mode of treatment over modern medicines and so was the case with tackling COVID-19 symptoms. These beliefs are rooted in the cultural fabric of this community, which serve as a social determinant and significantly influence their perception of reality and decision-making processes. The isolated geographical setting, further distanced by digital divide, reinforces these inaccuracies, creating an environment susceptible to misleading narratives, blemished health practices and It was also observed that the myths and misconceptions were more predominant in societies with less access to mainstream, reliable information sources, thus making this an issue of concern. The study disclosed many factors that intensify the misinformation in nomadic pastoralists of J&K like the challenge of access to basic healthcare due to rugged terrains, socio-economic factors, high cost of transportation and discrimination. Moreover, the precautions and hygiene practices recommended for preventing the spread of Covid-19 virus are not compatible with their traditional way of life closely connected with nature.

# Limitations of the study

- 1. This study is limited to nomadic pastoralists, so the findings might not be applicable to other communities.
- 2. This study typically has a small qualitative sample, making it hard to generalize results to the general population.

## Recommendations

- 1. Develop communication strategies in such way to debunk the misinformation that is deeply rooted in nomad pastoralist culture.
- 2. Encourage them to engage in health activities; equip them with skills for self-care and self-awareness.
- 3. Develop mutual trust between nomads and health workers to involve them to access modern healthcare interventions.
- 4. The study has the potential to extend to other tribal communities in context of other diseases in future.

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