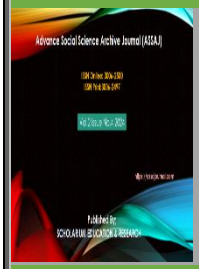

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THE EFFECT OF COGNITIVE, AFFECTIVE AND RISK PERCEPTION FACTORS IN INFLUENCING PUBLIC PREVENTIVE BEHAVIOR TOWARDS COVID-19 IN QUETTA

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ABSTRACT

Preventive behavior of individuals plays a critical role in controlling the extent of infectious diseases. COVID-19 underscored the significance of individuals' perceptions and attitudes towards the Covid-19 in shaping the public preventive behavior. This study analyzed cognitive, affective attitudes, risk perception and their effects on public preventive behavior employing structural equation modeling (SEM). For the purpose, a cross-sectional questionnaire based household survey with 323 respondents was conducted in Quetta city using simple random sampling. The results reveal that 46.7% respondents were having knowledge about Covid-19 and 59.1% were familiar with the symptoms while 57.6% had knowledge about the recommended preventive methods. The results further reveal that, 44% respondents felt anxious and 44.9 % felt fear when they thought of Covid-19. Furthermore, there was significant level of perceived personal risk and the likelihood of contracting the virus. In addition to that, results of the structural equation model reveal that cognitive attitude and affective attitude significantly influence public preventive behavior in Quetta city. The study recommends that these results may provide valuable insights for policy makers and health experts to develop appropriate strategies to boost preventive behaviors in the public by developing policy for risk reduction of such infectious disasters in future.

Key words: Covid-19, cognitive attitude, risk perception, preventive behavior.

1 Introduction

The Coronavirus disease caused by SARS-COV virus known as COVID-19. Initially reported in Wuhan, China in December 2019 (Ning et al. 2020). The continues spread of virus around the world convinced the World Health Organization to declare it as a global pandemic on 11 March, 2020 (Yanti et al. 2020; Ko et al. 2020). As of 5th July 2023, the World Health Organization (WHO) reported 767,726,861 confirmed cases globally. Among these cases, there have been 6,948,764 reported deaths. Pakistan has recorded a cumulative total of 1,580,631 confirmed cases. The number of deaths reached to 30,656 during this period (WHO 2023). The first case of Covid-19 in Quetta, Balochistan was confirmed on 10th March 2020 (Ilyas, Azuine, and Tamiz 2020). Till 10th July 2023, there was a total of 36068 confirmed cases reported by (Government of Pakistan 2023). Covid-19 is highly contagious (Ahmad et al. 2023). Health experts predicted that the occurrence of contagious viruses such as Ebola, H1N1 is not uncommon (Magnan et al. 2021).

A number of studies examined the public awareness and behavioral responses to the pandemic (Clavel et al. 2021) and a variety of models of behavior change have evaluated the public reaction to infectious disease outbreaks (Weston, Ip, and Amlôt 2020). These models suggest that public adaptation to recommended safety measures is influenced by their perception of risk. Those who believe that they have a higher chance to get affected by disease, are more likely to get vaccinated against it (Brewer et al. 2007). Health-related practices and behavior models argue that risk perception is a key factor. For example, Health Belief Model developed by social psychologist Hochbaum in 1950, argue that peoples' perception about susceptibility, severity, benefits and barriers affect their practices of preventive behaviors (Chambon et al. 2022; Magnan, Gibson, and Bryan 2021; Ko et al. 2020). In addition to that, the influential behavioral theories such as the Theory of Reasoned Action, The Subjective Expected Utility Theory, The Protection-Motivation-Theory, The Theory of Planned-Behavior, highlight the significance of risk perception in shaping risk behavior by considering factors like magnitude of hazard and probability of risk. Most Studies have identified a connection between risk perception and preventive behavior but the strength of relation is still debatable (Savadori and Lauriola 2021; Helweg-Larsen, Peterson, & DiMuccio 2022; Mehrolia, Alagarsamy & Jeevananda 2021; Yan & Jin 2023). Moreover, the model of Knowledge, Attitude and Practice (KAP) also provides relevant understanding of public responses towards infectious disease outbreaks. The KAP model emphasizes the importance of knowledge acquisition, attitude formation, and adaptation of appropriate practices (Fan et al. 2018). Previous KAP studies carried out during pandemic have examined different aspects, including awareness of the symptoms and routes of transmission, and preventive measures like avoiding certain

behaviors, donning Masks, and engaging in social distancing (ALdowyan et al., 2017). Therefore, assessing the risk perception, knowledge, and behaviors (RPKB) of the adult population in general and individuals at high risk can offer useful information that can be used to create more effective tactics and interventions for communicating and managing the Covid-19 spread (Clavel et al. 2021).

People's feelings and perceptions of actual risk are referred as "risk perception." It entails the subjective evaluation and comprehension of the level of severity and vulnerability of a possible danger or hazard (Gao & Chen, 2022; Yan & Jin, 2023). The way people perceive risk is a major factor in determining whether or not they will adopt risk-averse behaviors (Arezes and Miguel 2008). These include, individual experiences, beliefs, information, emotions, and cultural influence that can affect how one perceives risk. However, it is crucial to understand how people perceive and respond to danger, especially in situations involving health and safety (Yan and Jin 2023). Attitudes are composed of cognitive, affective, and behavioral components (Dwivedi et al. 2023). Ideas, information, and beliefs make up the cognitive component (TUNCA et al. 2021), and it describes how a subject is assessed and perceived in light of one's knowledge and thought processes. Affective attitude, however, is an emotional reaction to infection (Yan and Jin 2023), and it represents a person's inclination to behave, think, feel, and express their likes and dislikes regarding the attitude in concern (Oktariyanda et al. 2022). While the behavioral component represents the tendency of an attitude to turn into behavior or influence behavioral intentions. Attitudes play a crucial role in shaping decision-making processes and behavioral intentions, including their adherence to precautionary measures and their overall response to a specific situation or event. They are influenced by cognitive and affective factors, including knowledge, believe, emotions, values, and social norms (Yan and Jin 2023). There is evidence from studies on risk as feeling as well as risk as analysis that assessing affective risk is crucial for evaluating preventive intentions and behaviors (Helweg-Larsen, Peterson, and DiMuccio 2022). The initial researchers on Coronavirus outbreak and its transmission dynamics have directed that public awareness and conformity to preventive measures can highly influence the course of an outbreak (Clavel et al. 2021).

There is a lesser understood interplay of cognitive and affective attitudes with preventive behaviors in places like Quetta that are under-researched. This research will attempt to fill that gap by investigating how cognitive and affective attitudes as well as risk perception influence preventive behavior in Quetta so as to achieve better communication and intervention strategies during future pandemics. Understanding how individuals perceive their risk and the level of concern they have regarding Covid-19 is crucial for modifying public communications that can promote preventive

behavioral measures for reducing spread of similar kind of diseases (Magnan, Gibson, and Bryan 2021).

2. Research Methodology

2.1 Selection of Study Area

This research study was conducted in Quetta district, the provincial capital of Balochistan, Pakistan's ninth-largest city by population (Anjum et al. 2020; Mahar, Knapen, and Verbeeck 2017) and the most populous and largest district in province as well, located on the west edge of Pakistan. It is located at 30° 12′ 38″ N, 67° 1′ 8″ E with an average elevation of 1,680 meters above sea level, making it Pakistan's only high-altitude major city

District is prominently mountainous. The total area of the district is 1632 square km. This research is exploratory with cross-sectional study design. Both primary and secondary data were used. The secondary data include research articles, published reports, and web of world health Organization etc. while primary data was collected through household questionnaire survey. Data enumerators were employed for the questionnaire survey. The study focused on assessing the effect of peoples' cognitive attitude, affective attitude and risk perception on preventive behaviors of Covid-19.

2.3 Sample Size

The primary data was collected for this research using, simple random sampling technique. According to Population census- 2017, the total number of households in Quetta is 276,711. For the determining of the sample size, Arkin and Colton (1963) formula was employed:

While taking into account a confidence level of 95% (1.96), a degree of variability of 30% (0.03), and a level of precision of 5% (0.05). We obtained the sample size of 323 by applying formula of (Arkin, H. & Colton 1963), which satisfies minimum threshold (200) for structural equation modeling to be reliable (Hossain et al., 2021; Islam et al., 2022). In total, 350 questionnaires were administrated from June- 2022 to august-2022. 323 reliable questionnaires were selected for this study after piolet testing.

Additionally, the survey questionnaire comprised of 5 sections with 32 items. All items included in this research were adopted from WHO guidelines. The first section of Questionnaire had 5 items for measuring socio-demographic information of respondents, the second section cognitive domain with 9 items such as awareness, knowledge, and understanding (Alobuia et al. 2020; Ssebuufu et al. 2020; Paul et al. 2020). The third section affective domain includes 4 items about worry, fear, frustration and sadness (Hsieh et al., 2020; Magnan et al., 2021). The fourth sub-scale risk perception has 6 items about personal risk, community risk, health threat, susceptibility and severity (Bostan et al. 2020; Leigh et al. 2020). In the fifth sub-section, we include 8 items about preventive behavior (World Health Organisation 2022). On a 5-point

Likert scale, respondents indicated their level of agreement (strongly disagree to strongly agree, 1 to 5) for cognitive, affective and risk perception constructs and for public preventive behaviors, the scale ranges from 1= never to 5= always.

2.4 Data Analysis

This research study has used both descriptive and inferential statistics, for the statistical analysis, the paper utilized two software programs, Versions 23 of IBM-SPSS statistics and AMOS-SPSS statistics to explore descriptive and inferential statistics. The AMOS specifically examined correlations between variables and tested theoretical hypotheses using structural equation modeling (SEM). Descriptive statistics summarized the social-demographic profiles of the respondents, and spearman's correlations assessed the correlations between latent variables.

3. Results and Discussion

3.1. Socio-Demographic Information of Respondents

The demographic and socio-economic variables given in Table 1 below shows the respondents' age ranges from 17 to 74 with an average age of 32. Gender distribution shows cultural influence as majority of households 61% in Quetta headed by males and 39% female respondents. The majority (96%) reported no disabilities. Marital status revealed 56% single and 43% married respondents. Education wise, 50.5% of the respondents hold a Master's degree, 18.6% completed secondary or High School and smaller percentages were distributed among other categories. Occupation wise, 28.2% were unemployed, 24.1% had temporary employment, 36.8 % had permanent employment, and 10.8% were engaged in daily wage labor. The average monthly household income is 78,783 (approximately 278.41 USD, as of May 1, 2023 one USD= Rs 283.3876 (State Bank of Pakistan 2023) Rupees, with a range of 7,500 to 400,000 Rupees.

Table 1 Demographic Information (n=323)

Variables		Average	Minimum- Maximum
Age		32	17- 74
Number of Households		10	3-48
Monthly Household income (in Rs)		78783	7500-400000
Variables		**N**	**Percentage**
Gender	Male	197	61
	Female	126	39
Disability	No	311	96
	Yes	12	4
Marital status	Single	182	56
	Married	138	43
	Widow	2	1
	Divorced	1	0

Education	Illiterate	13	4.0
	Middle school and below	20	6.1
	Secondary and high school	60	18.6
	Bachelors (14 years)	48	14.9
	Masters (16 years)	163	50.5
	Above	19	5.9
Occupation	Unemployed	91	28.2
	Temporary	78	24.1
	Permanent	119	36.8
	Daily wage	35	10.8

Source: Household survey, 2022

3.2 Descriptive Analysis of Variables

This analysis represents a comprehensive overview of attitudes, risk perception and preventive behaviors in the surveyed population. The detail description of all variables used in the study are presented in Table 2, which shows that the knowledge of the people about Covid-19 was moderate to high. 46.7% respondents were having knowledge about its existence, while 56.3% considered it natural type of disaster. 48.9% were agreed and 28.5% were strongly agreed that virus is the cause for Covid-19. 51.7% respondents were aware about the reliable source of information about Covid-19 and 42.1% population strongly trust on authenticity of information about Covid-19 receiving from official health authorities. In addition, 59.4% were agreed that they know about the importance of Covid-19 testing and vaccination for controlling its spread. Moreover, 47.7 % were aware of the ways Covid-19 can spread and 59.1% said that, they are familiar with the typical Covid-19 symptoms, 57.6% had knowledge about recommended preventive methods. It can be inferred from the analysis that people are well aware about the covid-19 occurrence and its understanding.

The emotional responses vary that suggest mix of concern, fear, and negative emotions due to the pandemic. The Table 2. Further elaborates that 44% respondents feel anxious or worried when they thought about Covid-19 and 44.9 % feel fear of being suffered. 42.4% got frustrated as well about the impact of Covid-19 on their life. The feelings of sadness or depression also exists in them representing 37.2% due to the ongoing situation. Furthermore, there is a significant level of perceived personal risk indicated by high susceptibility to severe illness and the likelihood of contracting with Covid-19. Almost 32% respondents considered that they are susceptible to severe illness, 29.1% believed that they are on very high risk and 37% perceive likelihood of being suffered. 45.5% respondents think their health is seriously threatened by Covid-19. While 44.9% considered if they couldn't able to get vaccinated due to any reason, there will be a high chance for them to be affected in coming years. 35.9% perceive Corvid as a serious health concern for themselves and those around them.

Adaptation of preventive behaviors varies; some behaviors show less consistent adherence such as refraining from touching the face with18% and avoiding social gatherings 18.3%. However, with a notable portion reporting frequent adherence to measures such as hand hygiene represent 27.9%, physical distancing 24.1% and mask-wearing in public places 22.9%.

Table 2. Key Attributes and Descriptive Statistics of Latent Constructs

Latent construct	Variable Code	Variable Description/ Item	Qualitative Scale Distribution of Respondents				
			Strongly disagree n (%)	**Disagree n (%)**	**Neutral n (%)**	**Agree n (%)**	**Strongly agree n (%)**
Cognitive Attitude	C1	I have the knowledge about existence of Covid-19	22 (6.8%)	46 (14.2%)	8 (2.5%)	151 (46.7%)	96 (29.7%)
	C2	I know COVID-19 is Natural type of disaster	11 (3.4%)	62 (19.2%)	9 (2.8%)	182 (56.3%)	59 (18.3%)
	C3	I know the cause of COVID-19 is a virus	20 (6.2%)	39 (12.1%)	14 (4.3%)	158 (48.9%)	92 (28.5%)
	C4	I am aware about the reliable source of information for COVID-19	18 (5.6%)	41 (12.7%)	15 (4.6%)	167 (51.7%)	82 (25.4%)
	C5	I trust on authenticity of information about COVID-19 receiving from official health authorities	22 (6.8%)	39 (12.1%)	10 (3.1%)	116 (35.9%)	136 (42.1%)
	C6	I have the knowledge about the importance of COVID-19 testing and vaccination for controlling its spread	20 (6.2%)	45 (13.9%)	10 (3.1%)	192 (59.4%)	56 (17.3%)
	C7	I am aware of the ways COVID-19 can spread (direct contact with infected persons, inhalation of droplets from infected people, and touching contaminated objects or surfaces).	19 (5.9%)	39 (12.1%)	15 (4.6%)	154 (47.7%)	96 (29.7%)
	C8	I am familiar with the typical COVID-19 symptoms, including fever, coughing, exhaustion, sore throats, aches and pains, loss of	17 (5.3%)	49 (15.2%)	4 (1.2%)	191 (59.1%)	62 (19.2%)

		taste or smell, and shortness of breath.					
	C9	I know the recommended preventive methods for COVID-19 (vaccination, social distancing, hygienic routine, masks wearing etc)	22 (6.8%)	39 (12.1%)	12 (3.7%)	186 (57.6%)	64 (19.8%)
Affective attitude	A1	I feel anxious or worried when I think about COVID-19.	27 (8.4%)	66 (20.4%)	52 (16.1%)	142 (44%)	36 (11.1%)
	A2	I feel fear of getting COVID-19.	35 (10.8%)	72 (22.3%)	40 (12.4%)	145 (44.9%)	31 (9.6%)
	A3	I feel angry or frustrated about the impact of COVID-19 on my life	38 (11.8%)	65 (20.1%)	44 (13.6%)	137 (42.4%)	39 (12.1%)
	A4	I experience sadness or depression due to the ongoing COVID-19 situation.	32 (9.9%)	79 (24.5%)	45 (13.9%)	120 (37.2%)	47 (14.6%)
Public Risk perception	R1	I consider myself susceptible to severe illness If I got COVID-19.	35 (10.8%)	30 (9.3%)	78 (24.1%)	105 (32.5%)	75 (23.2%)
	R2	I believe that my risk of contracting with COVID-19 is very high.	25 (7.7%)	50 (15.5%)	108(33.4%)	94 (29.1%)	46 (14.2%)
	R3	I feel that the likelihood of getting COVID-19 is high in my community.	38 (11.8%)	58 (18%)	64 (19.8%)	120 (37.2%)	43 (13.3%)
	R4	I think that my health is seriously threatened by COVID-19	15 (4.6%)	60 (18.6%)	73 (22.6%)	147 (45.5%)	28 (8.7%)
	R5	If I couldn't able to get vaccinated with any reason what their will be high chance of contracting with COVID-19 in coming years	36 (11.1%)	46 (14.2%)	60 (18.6%)	145 (44.9%)	36 (11.1%)
	R6	I perceive COVID-19 as a serious health concern for myself and those around me.	32 (9.9%)	48 (14.9%)	81 (25.1%)	116 (35.9%)	46 (14.2%)
Latent construct	**Variable C**	**Variable Description/ item**	**Never**	**Rarely**	**Sometimes**	**Frequently**	**Always**

	o de						
Public Preventive Behavior	B1	I keep physical distancing at least 2 meters (6 feet) in crowded places	41 (12.7%)	40 (12.4%)	104 (32.2%)	78 (24.1%)	60 (18.6%)
	B2	I avoid from social gatherings	41 (12.7%)	45 (13.9%)	115 (35.6%)	59 (18.3%)	63 (19.5%)
	B3	To minimizing the risk of virus transmission, I am refrained from touching face especially eyes, nose and mouth	51(15.8%)	72 (22.3%)	93 (28.8%)	58 (18%)	49 (15.2%)
	B4	I regulate hand hygiene by washing or sanitizing my hands	34 (10.5%)	58 (18%)	61 (18.9%)	90 (27.9%)	80 (24.8%)
	B5	I avoid being close with people who have fever and cough	31 (9.6%)	38 (11.8%)	106 (32.8%)	91 (28.2%)	57 (17.6%)
	B6	I do facemask whenever I am at crowded or public places	19 (5.9%)	41 (12.7%)	99 (30.7%)	74 (22.9%)	90 (27.9%)
	B7	I stopped touching unprotected surfaces that are often touched by others	36 (11.1%)	65 (20.1%)	121 (37.5%)	68 (21.1%)	33 (10.2%)
	B8	I confined myself in home when experiencing COVID-19 symptoms or if get instructed by public health authorities	25 (7.7%)	53 (16.4%)	122 (37.8%)	82 (25.4%)	41 (12.7%)

Source: Household Survey, 2022

3.3 Results of the Structural Equation Model

Structural equation modeling (SEM) is a methodology and multivariate statistics for representing, estimating, and testing a network of relationships between measured variables and latent constructs (Baker et al. 1993). Therefore, this paper tried to investigate the relationships between the observed variables (cognitive attitude, affective attitude, risk perception) and latent construct (Public preventive behavior). Based on the four constructs of this study, cognitive attitude, affective attitude, risk perception, and preventive behaviors, a structural model was developed using maximum likelihood estimation before the calculation of path coefficients for the proposed hypothesized structural model as shown in (Figure 1).

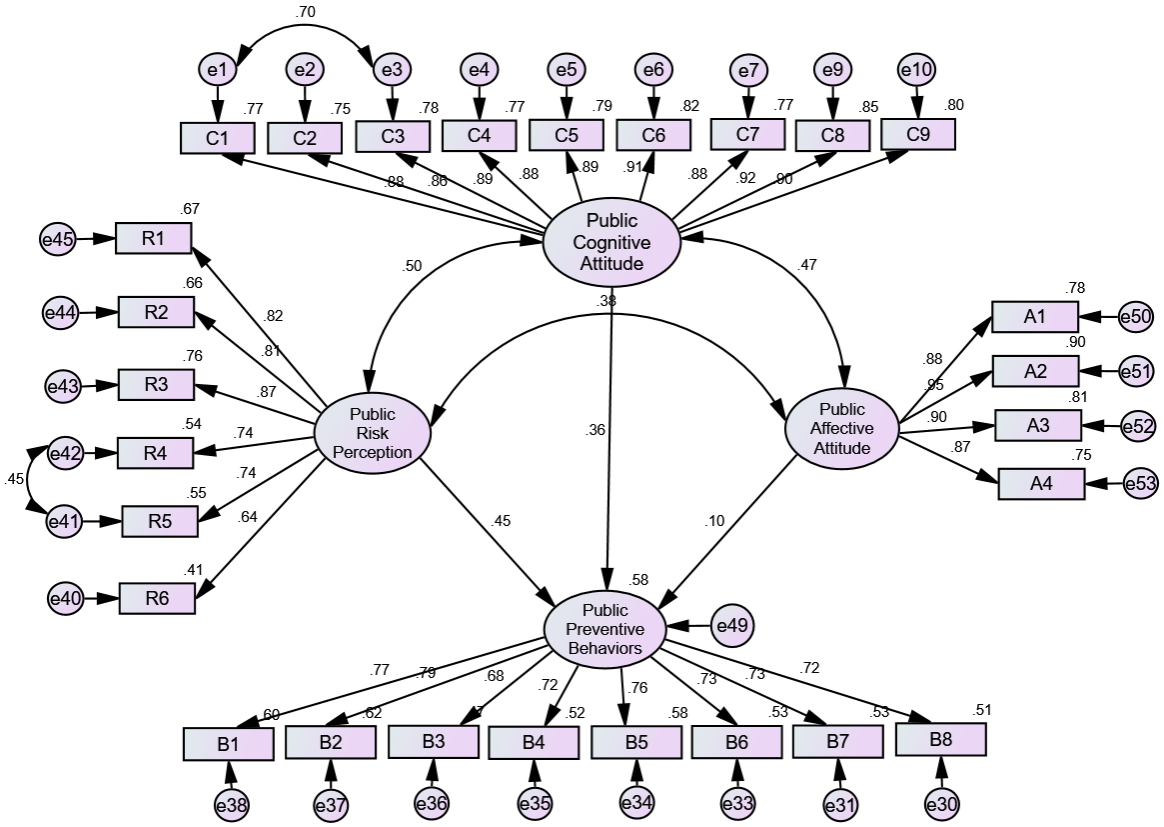

Figure 1. The Results of Structural Equation Modeling
Source: Household Survey, 2022

These structural analysis observed significant results, with the chi-square (X^2) test yielding a value of 461.453 with 316 degree of freedom ($p<0.000$). The goodness of fit indices: (P Close=0.998, CFI=.981, AGFI=.885, GFI=.904, PGFI=.756, IFI=.981, TLI=.979, NFI=.944) demonstrated a somewhat excellent model fit with CMIN/DF ratio of 1.460. Further, the model's residuals as well as error estimates were also acceptable (RMSEA=0.038, SRMER=0.038). These results point to an appropriate model fit for the studied data. The chi-square test was significant ($p<0.000$), which is common in large samples, but the other fit indices provide more informative and meaningful measures of model fit. The CMIN/DF ratio falls within an acceptable range, indicating a good fit of the model to the data. Additionally, the GFI, AGFI, NFI, IFI, TLI, CFI, SRMR, and RMSEA values, all indicate a good fit. The findings reveal significant relationship between cognitive and affective attitudes towards COVID-19 ($\beta = 0.466$, $t = 7.028$, $p<0.001$), as well as their connections with public risk perception. Specifically, cognitive attitude and public risk perception are strongly related to each other ($\beta= 0.499$, $t = 6.619$, $p< 0.001$), as are public risk reception and affective attitude ($\beta = 0.384$, $t = 5.501$, $p< 0.001$). Moreover, both cognitive attitude and affective attitude significantly influence public

preventive behaviors (β = 0.358, t = 6.269, p < 0.001), (β = 0.103, t = 2.074, p = 0.038). The results support the notion that public risk reception towards COVID-19 also plays a substantial role in shaping public preventive behaviors (β = 0.454, t = 6.921, p<0.001). The squared multiple correlation was 0.578 for public preventive behaviors, this shows that 58 percent variance in preventive behavior is accounted by cognitive attitudes, affective attitudes and risk perception in future research we can find other factors which influencing preventive behaviors. Overall, the data demonstrates the intricate interplay between attitudes, risk reception and preventive behaviors concerning COVID-19 in public sphere.

3.4 Discussion

The findings reveal that respondents were moderate to highly informed about Covid-19, indicating community strong believe on access to information. The results are in line with the previous studies conducted by (Ampofo and Aidoo 2022; Alahdal, Basingab, and Alotaibi 2020; Motta Zanin et al. 2020) who argued that access to information regarding specific health issue can influence the knowledge of the community. The study found significant positive influence of cognitive attitudes on public preventive behaviors of COVID-19 in Quetta city. The results are also supported by previous studies emphasizing knowledge is a crucial factor in shaping people preventive behaviors during epidemics (Vartti et al. 2009). The significant positive relationship indicates that individuals with more knowledgeable and understanding are more inclined to engage in public preventive behavior (Ning et al. 2020; Min et al. 2020; Lim, Shin, and Park 2023). This finding highlight the significance of information dissemination and education in promoting adherence to preventive measures within the public.

The study further indicates that emotional responses reveal significant level of concern and negative impact on mental health due to increase in level of anxiety, frustration, depression and fear because of pandemic. A significant influence of affective attitude on COVID- 19 public preventive behaviors in Quetta city was identified in study but with the lower effect size. The significant positive relationship suggests that individuals with more negative emotional responses towards the virus are somewhat more inclined to engage in preventive behaviors (Min et al. 2020; Masek et al. 2022). (Meng et al. 2023) notes that negative emotions influence various behavioral changes as fear can motivate individuals to perform protective measures. It implies that emotional reaction can play a vital role in shaping individuals preventive behavior.

The significant level of perceived personal risk indicated by high susceptibility to severe illness and the likelihood of contracting COVID-19 was found in study participants. The influence of public perception on public preventive behavior towards COVID-19 in Quetta city was identified in this study. The significant positive relationship indicates

that individuals with higher risk perception participate more in preventive actions. As previous studies have highlighted the significance of risk perception as a predicator of protective behaviors during pandemics, as observed during the Middle East Respiratory Syndrome (MERS) and H1N1 flu outbreaks (Choi and Kim 2016; Bults et al. 2011). This findings emphasizes the importance of risk perception as a motivator for adopting preventative measures, as individuals perceived higher risk are more inclined to take action to protect themselves and others.

4. Conclusion

This study investigated the attitudes, risk perception and their effect on COVID-19 preventive behavior in the study area. The research results imply that COVID-19 preventive behaviors are associated with high knowledge (cognitive attitude), negative emotions (affective attitude), perceived susceptibility and perceived severity. The results reveal a positive relationship that how knowledge and perception influence the preventive behavior of the people. Furthermore, the result emphasizes on the importance of comprehensive health strategies that can deal with people risk perception, and with both cognitive and affective attitudes to improve community health behaviors. The paper concludes that the study results may provide valuable insights for policy makers and health experts to develop appropriate strategies to boost preventive behaviors in the public and develop a risk prevention mitigation measures for health emergencies in the future. The findings further recommend few important actions for policy and health such as information must be spread by campaigns focused on encouraging COVID-preventive measures. Mitigation of emotional aspects such as fear and anxiety thereby reducing resistance to behaviors. Formulation of communication strategies, devoid of panic that deal with perceived susceptibility and severity. The research is significant but have few limitations. This study is carried out in Quetta city, and could not cover the whole province due to time and budgetary constraints. Future research can be longitudinal. There were variables such as social norms, economic conditions-and cultural influences which are not presented in the model but may still explain further variance.

Ethical Statement

This particular research is conducted which assesses the Attitudes, Risk Perception, and Preventive Behaviors towards covid_19 in Balochistan, using a survey design technique which is people centric focusing on the perception of the people of Quetta city. The research study is conducted under the guidelines of the Research Ethics Committee of the University of Balochistan, Quetta, which was approved under No. RUB/Esstt/T-08:598-05, dated on 15-05-2022. This research has nothing with the animals however the research is conducted with the participation of the people in the study area following the structural and behavioral laws of the social science.

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