


# Knowledge, Attitude, and Practice Towards Face-Mask Use Amid the Coronavirus 2019 Pandemic Among Public Transport Drivers in Gondar Town, A Cross-Sectional Study

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## Abstract

**Background.** Coronavirus disease (COVID-19) is a highly communicable virus that continues to interrupt livelihoods, predominantly those of low-income segments of society. For the prevention of respiratory infections like the current COVID-19 outbreak, face masks are considered an effective approach.

**Objective.** This study intended to assess the knowledge, attitude, and practice of public transport drivers towards face mask use amid the COVID-19 pandemic in Gondar, Ethiopia.

**Methods.** A cross-sectional study was conducted among 412 public transport drivers in Gondar town from July to September 2021. The study subjects were recruited using a simple random sampling technique after proportionally allocating the sample size from the total number of public transport drivers, and finally, study subjects were selected using the convenience sampling method to select the participant drivers working in Gondar Town. The data were collected by face-to-face interview administered questionnaires and an on-the-spot observational checklist.

**Results.** A total of 412 public transport drivers have participated in the study. The mean age of the respondents was 32.75 years ( $\pm 8.75$  years). The majority of the participants were Bajaj drivers 193 (46.84%). Among the responders, 114 (27.67%) of them use radio to gather information about the pandemic and 50 (12.14%) of them had reported being caught by COVID-19. Meanwhile, only 32 (7.77%) were vaccinated against COVID-19. Drivers that had a diploma level of education were found to be 87.7% less knowledgeable than degree holders (AOR .123, 95% CI = .026, .573). Respondents that had good knowledge about COVID-19 and face masks were found to have 1.7 times more positive attitudes than those that had poor knowledge (AOR = 1.728, 95% CI = 1.150, 2.596). Drivers whose family members have ever been caught by COVID-19 were found 2 times more likely to use face masks whenever they are working/driving (AOR = 2.173, 95% CI = 1.015, 4.652) than their counterparts.

**Conclusion.** This study revealed a very low Knowledge, attitude, and practice of face mask use among public transport drivers in Gondar town. Periodic reinforcement and training programs are needed for all public transport drivers in each level for proper understanding and adherence to COVID-19 prevention protocols and the use of face masks.

## Keywords

attitude, coronavirus 2019, cross-sectional, drivers, face mask, knowledge, practice

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**What do we already know about this topic?**

Coronavirus Disease (COVID-19) is a highly communicable virus that continues to interrupt livelihoods, predominantly those of low-income segments of society

**How does your research contribute to the field?**

The current study will contribute to the existing data and will fulfill the paucity of research in this area. Thus, the findings of the study will fill the gaps on proper reinforcement measures from local government bodies to strictly monitor the practice of mask-wearing.

**What are your research's implications for theory, practice, or policy?**

The findings of the study will guide periodic reinforcement and training/orientation programs for all levels of drivers for adherence with appropriate knowledge, attitude, and use of face mask during his or her working or driving time through the respective Driver's Association, awareness creation campaigns in co-operations with local FMs and Gondar Health Office, and proper reinforcement measures from local government bodies to strictly monitor the practice of mask-wearing.

**Introduction**

COVID-19 is a transmissible disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).<sup>1</sup> The disease mainly affects the lungs and is associated with neurological and mental manifestations among others.<sup>2-4</sup>

Most COVID-19 patients experience cough, fever, anorexia, fatigue, and shortness of breath.<sup>5</sup> Though, other nonspecific symptoms may include sinus headache, sore throat, nausea, diarrhea, vomiting, and congestion. Evidence showed that the 2 key routes of transmission of the COVID-19 virus are contact and respiratory droplets.<sup>6</sup> Transmission of COVID-19 can occur through direct, indirect, or close contact with secretions, such as respiratory secretions and saliva or respiratory droplets, expelled from a COVID-19 infected patients.<sup>7-9</sup>

The widespread usage of face masks can help reduce virus transmission between individuals who are infected with the virus but have not yet acquired symptoms, as well as between individuals who do not have symptoms but are infected with the virus.<sup>10</sup> In Ethiopia, the number of people infected with COVID-19 has been increasing dramatically.<sup>11,12</sup> According to the most recent data, up to March 26, 2022, the number of confirmed cases in Ethiopia reached 469,604, of which 7,491 were dead and 431,244 were recovered.<sup>13</sup> COVID-19 precaution measures such as wearing a mask are 1 of the main and easy-to-use prevention measures. However, it was not known previously to what extent drivers who have frequent daily contact with community members during the provision of transportation service were perceived to know about the efficacy of prevention measures.<sup>14</sup>

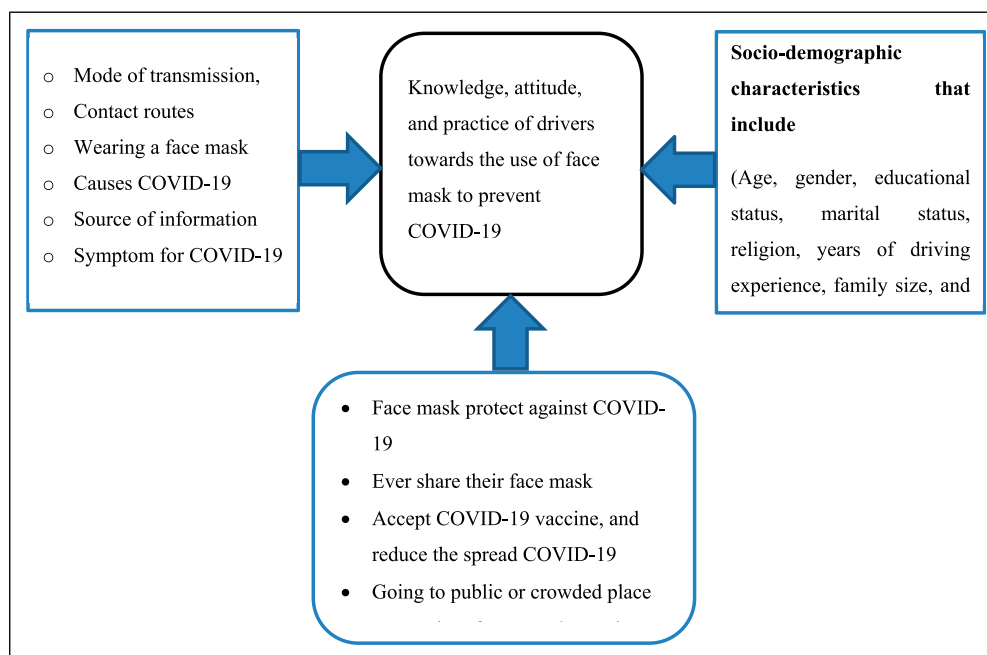
Several types of vaccines have been used worldwide to prevent and control the pandemic. However, the clinical setups and level of supportive measures employed vary across countries and it mainly depends on economic status.<sup>15</sup> Despite these efforts, the primary preventive measures, which are very feasible and adaptable and remain mandatory. The best option is wearing Personal Protective Equipment (PPE) in resource-limited settings. Washing hands, wearing face masks, staying home, and

maintaining physical distance were the main measures suggested to avert the disease worldwide.<sup>16</sup> The use of face masks has been recommended and accepted worldwide as a tool for COVID-19 prevention since the outbreak in China. Depending on the type, masks can be used either to prevent onward transmission or for the protection of healthy persons.<sup>17,18</sup> A study conducted at Phenikaa University had a positive attitude and good practice scores towards COVID-19 prevention measures.<sup>19</sup> In a similar study conducted in western Uganda, most participants were confident enough to correctly put on a face mask; believed that face mask can protect against COVID-19 and most of the participants had never shared their face mask.<sup>20</sup> A study conducted in Dire Dawa City, Ethiopia revealed that sex, marital status, income, history of chronic disease, history of substance abuse (khat chewing), knowledge, and attitude about COVID-19 were associated factors with COVID-19 preventive practices.<sup>16</sup> (Figure 1)

Due to their nature of work, some groups of the population such as health care workers and public transport drivers are particularly vulnerable to the pandemic. However, although many studies were conducted on different aspects of the disease on health care workers, only a few studies were conducted on public transport drivers. In addition, studies examining the association of driver's PPE use with the acquisition of COVID-19 is needed to protect public transport drivers and decrease inappropriate PPE use.<sup>20,21</sup> Consequently, the current study will contribute to the existing data and will fulfill the paucity of research in this area. Thus, this study intended to assess the knowledge, attitude, and practice of public transport drivers towards face mask use amid the COVID-19 pandemic.

**Methods and Materials****Study Design, Setting, and Period**

A cross-sectional study was conducted among public transport drivers in Gondar town, Gondar, Northwest Ethiopia. Gondar



**Figure 1.** Conceptual frameworks to assess knowledge, attitude, and practice towards face mask use amid the COVID-19 pandemic among public transport drivers in Gondar town, Ethiopia, 2021.

town is located 732 km away from Addis Ababa (capital city of Ethiopia). As of 2016, Gondar has a population of 299,969 having 12 sub cities which consisted of 21 kebeles. There are 8 health centers, 1 referral hospital, and 21 private clinics in the town. At the time of the study, there were 5260 public transport drivers in Gondar town. The study was conducted from July 2021 to September 2021.

**Source Population.** All drivers that work in Gondar town were the source population.

**Study Population.** All public transport drivers that were working at the Mini, Long-run bus stations, taxi/Bajaj stands of Gondar town during the data collection period were the study population.

**Inclusion Criteria.** All drivers that drive Taxi, Bajaj, long-run bus, long-run minibus, and public service buses in Gondar town and that were volunteered to participate were included in the study.

**Exclusion Criteria.** Those who work temporarily, drivers who were not available during the data collection period.

**Dependent Variables.** These include knowledge of drivers towards the use of face masks; attitude of drivers towards the use of face masks, and practices of drivers towards the use of face masks.

**Independent variables.** These include the socio-demographic characteristics of the participants and related environmental factors.

### Sample Size Determination

A single population proportion formula  $n = \frac{(Z a/2)^2 P (1-P)}{d^2}$  was used to estimate the sample size. For maximum sample size assumptions (Proportion of 50, 95% confidence level ( $Z = 1.96$ ), and 5% margin of error were used. With this, the required sample size was 384. By adding 10% non-response rate, the final sample size was 422.

### Sampling Technique

Eight government sector bus drivers, 1 bus station (Arada station), and 10 Bajaj/taxi waiting for stations/“Fermata” (stands) were selected using the lottery method. Therefore, 177 taxies and Bajaj drivers and 30 Long run-bus and Minibus drivers were recruited. Then, the daily average drivers who attended those stations and waiting areas units were estimated. Finally, based on their drivers’ load, the sample was allocated proportionally. Finally, data were collected from eligible subjects using face-to-face interviews and observation.

Simple random sampling technique (5 selected Transportation) and proportional samples

The calculation used to proportionally allocate is:

$$\text{Formula } n_i = n \cdot n_j / N$$

$$N = n_1 = n_2 = n_3 = n_4 = n_5 = 5259$$

$$N = 422$$

**Data collection tool and procedures.** An English version of the face-to-face interviewer-administered questionnaire was adapted from different works of literature.<sup>7,22,23</sup> The questionnaire was then translated into Amharic language to make it easier for study participants to understand. It contained 7 parts: socio-demographic characteristics, general knowledge of the participant, attitude towards the use of face masks among participants, face mask use practice, and behavioral factors affecting face mask wearing. The final sections consist of questions to be filled by the interviewer via observation. Three pharmacy professionals were involved in the data collection.

### Data Quality Control

The questionnaire was pre-tested on 5% of the total sample size. Based on the feedback all necessary amendments were conducted accordingly and the questionnaire was assessed for its clarity completeness and validity. Close supervision was also made during the data collection and appropriate feedback was provided.

### Operational Definitions

**Face Mask Wearing.** Using a reusable or disposable device that creates a physical barrier between the nose and mouth of the wearer.<sup>24</sup>

**Good Knowledge.** Those study participants whose number of correct answers was above or equal to the mean score to 9 knowledge questions about COVID-19.<sup>11</sup>

**Poor Knowledge.** Those study participants whose number of correct answers was below the mean score to 9 knowledge questions about COVID-19.<sup>11</sup>

**Positive Attitude.** Those study participants whose number of correct answers was above or equal to the mean score to eleven attitude questions about taking precautions against the transmission of COVID-19.<sup>25</sup>

**Negative Attitude.** Those study participants whose number of correct answers was below the mean score to eleven attitude questions about taking precautions against the transmission of COVID-19.<sup>25</sup>

**Practice.** Application of knowledge to the subject matter.

**The Proportion of Face Mask Wearing.** The number of drivers who were wearing a face mask that covered the nose, mouth, lower jaw, and facial hair at the time of data collection was divided by the total number of study participants.<sup>24</sup>

**Fermata.** A taxi station/stand.

**Bajaj.** A three-wheel city drive used for transporting up to 3 people.

### Statistical Analysis

The data was checked for its consistency, completeness, and validity. After checking the collected data, it was entered into Statistical Package for the Social Sciences (SPSS) version 20 statistical software for analysis. Descriptive analysis was computed and results were presented using texts, graphs, diagrams, and tables. The multivariate and univariate logistic regression analyses were computed to identify associated factors. Variable to be contained within the multiple regression model, must be significantly correlated with the main outcome in the univariate analysis. Odds ratios and their corresponding 95% confidence intervals were determined. Statistical significance was set at a 95% confidence interval using a *P*-value of  $\leq 0.05$  as a cutoff point.

### Ethical Considerations

Ethical clearance was obtained from the ethical review board of the School of Pharmacy of the University of Gondar with an approval number of UOG -SOP262/2021. An additional support letter was sought from the Gondar town administration health bureau, and a permission letter was obtained from each Kebele administration. Oral and written informed consent was obtained from the study participants before commencement of the data collection and confidentiality of the information was ensured throughout the study. In addition, any personal identifiers were omitted from the questionnaire.

## Results

### Socio-Demographic Characteristics of Study Participants

A total of 412 drivers, with a response rate of 96.4% participated in this study. The mean and median age was 32.75 years ( $\pm 8.75$  years) with the majority being in the age range of 26-35 years 186 (45.15%). The majority of the respondents 193 (46.84%) were high school leaver's in their educational status and over half of the respondents, 247 (59.96%) were orthodox Christians. Bajaj drivers constitute the majority of the study participants 193 (46.84%) followed by taxi 167 (40.53%) and long run bus 22(5.34%). The majority of drivers have driving experience of 5 years or less 279 (67.72%), and more than half of the participant's monthly income was between 1000-5000 Ethiopian birr 266 (64.56%). Out of the total study subjects, 35 (8.5) of respondents reported having a chronic disease, in which 31(7.52%), 23 (5.58%), and 11 (2.67%) have diabetes mellitus (DM), hypertension (HTN), and Asthma respectively. More than one-third 145 (35.6%) of the drivers were employees, while only 94 (23.1%) drive their own vehicle.

**Table 1.** Socio-demographic characteristics of public transport Drivers, Gondar, Ethiopia,2021.

Variables	Category	N (%)
Gender	Male	388 (94.17%)
	Female	24 (5.83%)
Age	18-25	89 (21.6%)
	26-35	186 (45.15%)
	36-45	101 (24.51%)
	46-55	29 (7.04%)
	>55	7 (1.7%)
Religion	Orthodox	247 (59.96%)
	Muslim	125 (30.34%)
	Catholic	3 (.73%)
	Protestant	36 (8.74%)
	Jewish	1 (.24%)
Educational level	No formal education	6 (1.46%)
	Elementary education	42 (10.19%)
	high school education	193 (46.84%)
	Preparatory education	75 (18.2%)
	Diploma	76 (18.45%)
	Degree	20 (4.85%)
Marital status	Single	158 (38.35%)
	Married	206 (50.0%)
	Widowed	14 (3.4%)
	Divorced	34 (8.25%)
Type of car driven	Taxi	167 (40.53%)
	Bajaj	193 (46.84%)
	Public service bus	9 (2.18%)
	Long run bus	22 (5.34%)
	long run minibus	21 (5.1%)
Years of driving experience	<5	279 (67.72%)
	5-10	116 (28.16%)
	>10	17 (4.15%)
Monthly income	<1000	8 (1.94%)
	1000-5000	266 (64.56%)
	5001-10 000	129 (31.31%)
	>10 000	9 (2.18%)
Do you have any chronic disease	Yes	35 (8.5)
	No	377 (91.5%)
Types of chronic disease	DM	31 (7.52%)
	HTN	23 (5.58%)
	ASTHMA	11 (2.67%)
Presence of chronic disease in the family	Yes	57 (13.83%)
	No	355 (86.17)
Types of chronic disease in the family	DM	19 (4.61%)
	HTN	25 (6.07%)
	ASTHMA	11 (2.67%)
Have you been caught by COVID-19	Yes	50 (12.14%)
	No	362 (87.86%)

(continued)

**Table I.** (continued)

Variables	Category	N (%)
Family members been caught by COVID-19	Yes	42 (10.19%)
	No	370 (89.81%)
Source of information about COVID-19	Radio	114 (27.67%)
	TV	61 (14.81%)
	Passengers	37 (8.98%)
	Family/friends	68 (16.5%)
	Facebook	31 (7.52%)
	Telegram	18 (4.37%)
	YouTube	13 (3.16%)
If you have any of the symptoms, do you isolate yourself	Yes	253 (62.2%)
	No	154 (37.59%)
Owner of the vehicle/car you drive	Own vehicle	99 (24.03%)
	Government	27 (6.55%)
	Private company	37 (8.98%)
	Rented/borrowed	104 (25.24%)
	Employed	145 (35.19%)
Owner of the vehicle, provide you protective measures	Yes	49 (11.89%)
	No	363 (88.11%)
Are you vaccinated against COVID-19	Yes	32 (7.77%)
	No	380 (92.23%)
Doses of the vaccine received	1 <sup>st</sup> dose	36 (8.73%)
	2 <sup>nd</sup> doses	2 (.48%)
	Unavailable	312 (75.73%)
	I don't want to be vaccinated	44 (10.68%)
	I don't know about vaccine	18 (4.37%)

Among the employed participants only 12% of the employers were reported to provide protective measures.

Regarding the source of information, the majority of drivers or respondents get any COVID-19 related information from radio 114 (27.67%) followed by family/friends 68 (16.5%). Additionally, more than half of the respondents 253 (62.2%) refuse to isolate themselves if they develop signs and symptoms of COVID-19. Of the participants, 32 (7.77%) claimed to be vaccinated against COVID-19; of which only 36 (8.73%) and 2 (.48%) of them took the first and second dose of the vaccine, respectively. The remaining 44 (10.68%) do not want to be vaccinated while 18 (4.37%) do not have the information about the vaccine on how and where to get vaccinated. (Table1)

### Knowledge of the Study Participants

The study showed that the overall knowledge of the students was 196 (47.57%). Two hundred seventy-five (66.75%) of the drivers considered COVID 19 as a fatal disease and 126 (20.58%) of respondents know the signs and symptoms of COVID-19 which is (dry cough, fever, myalgia, and fatigue),

while 254 (61.65%) of them uncertain whether this is the manifestation of the viral disease. The majority of study subjects 278 (67.48%) know the transmission routes of COVID-19 (Through the air, physical contact). Moreover, 178 (43.20%) of the participants were aware of which side of a face mask should be inwards and which should face outwards. However, below half of respondents 110 (26.7%) agree that wearing a face mask protects against the pandemic while 260 (63.11%) believe that wearing a face mask will not protect from COVID-19. Among the participants, most of them 221 (53.64%) doesn't know the purpose of the metal strip on a surgical mask while around 70 (16.99%) of the study subjects were uncertain about the function of the metal strip which is found on the surgical mask. Only 115 (27.91%) claimed to know the characteristics/differences between the different types of face masks (Surgical mask, N95, Cloth mask) while 229 (55.58%) does not aware of the difference. (Table2)

### Attitude of the Respondents

The study showed that the overall attitude of the students was 160 (38.83%). About 104 (25.24%) of the participants

**Table 2.** General information about public transport Drivers, Gondar, Ethiopia.

Variables	Categories	n (%)
Do you have any chronic disease	Yes	35 (8.5)
	No	377 (91.5%)
Types of chronic disease	DM	31 (7.52%)
	HTN	23 (5.58%)
	ASTHMA	11 (2.67%)
Presence of chronic disease in the family	Yes	57 (13.83%)
	No	355 (86.17)
Types of chronic disease in the family	DM	19 (4.61%)
	HTN	25 (6.07%)
	ASTHMA	11 (2.67%)
Have you been caught by COVID-19	Yes	50 (12.14%)
	No	362 (87.86%)
Family members been caught by COVID-19	Yes	42 (10.19%)
	No	370 (89.81%)
Source of information about COVID-19	Radio	114 (27.67%)
	TV	61 (14.81%)
	Passengers	37 (8.98%)
	Family Friends	68 (16.5%)
	Facebook	31 (7.52%)
	Telegram	18 (4.37%)
	YouTube	13 (3.16%)
If you have any of the symptoms, do you isolate yourself	Yes	253 (62.2%)
	No	154 (37.59%)
Owner of the vehicle/car you drive	Own vehicle	99 (24.03%)
	Government	27 (6.55%)
	Private company	37 (8.98%)
	Rented/borrowed	104 (25.24%)
	Employed	145 (35.19%)
Owner of the vehicle, provide you protective measures	Yes	49 (11.89%)
	No	363 (88.11%)
Are you vaccinated against COVID-19	Yes	32 (7.77%)
	No	380 (92.23%)
Doses of the vaccine received	1st dose	36 (8.73%)
	2nd doses	2 (.48%)
	Unavailable	312 (75.73%)
	I don't want to be vaccinated	44 (10.68%)
	I don't know about vaccine	18 (4.37%)
Do you think COVID-19 is a fatal disease?	Yes	275 (66.75%)
	No	126 (30.58%)
	Uncertain	11 (2.67%)
Do you know the signs and symptoms of COVID-19? (Fever, fatigue, dry cough, myalgia ...)	Yes	126 (20.58%)
	No	32 (7.77%)
	Uncertain	254 (61.65%)

(continued)

**Table 2.** (continued)

Variables	Categories	n (%)
Do you know transmission routes of COVID-19	Yes	278 (67.48%)
	No	107 (25.97)
	Uncertain	27 (6.55)
Wearing a face mask will protect from COVID-19?	Yes	110 (26.7%)
	No	260 (63.11%)
	Uncertain	91 (22.09%)
Wear a face mask necessary even, if you don't have COVID-19	Yes	106 (25.73%)
	No	260 (63.11%)
	Uncertain	46 (11.17%)
Do you know which side of a face mask should be inwards and which should face outwards?	Yes	178 (43.20%)
	No	187 (45.4%)
	Uncertain	47 (11.41%)
Purpose of the metal strip on a surgical mask	Yes	121 (29.37%)
	No	221 (53.64%)
	Uncertain	70 (16.99%)
Do you know differences and different types of face masks (surgical mask, N95, cloth mask)	Yes	115 (27.91%)
	No	229 (55.58%)
	Uncertain	68 (16.5%)

believed that a cloth face mask is as effective as a regular surgical face mask or N95 in limiting the spread of COVID-19. Moreover, the majority of responders 253 (61.41%) believe that it's difficult for others to see their facial expressions when wearing a face mask, and 289 (70.15%) respondents responded that they experience breathing difficulty when wearing a face mask.

More than half of drivers 195 (47.33%) agreed that people misinterpret their feeling when wearing a face mask while 120 (29.13%) were neutral. About 59 (14.32%) of the participants feel embarrassed when wearing a face mask. A higher proportion of participants 180 (43.69%) don't consider the appearance of a face mask as unpleasant, 233 (57.2%) feels uncomfortable when wearing a face mask. Most of the participants 289 (70.15%) reported having breathing difficulty when wearing a face mask. More than half of the respondents 268 (65.05%) believe face mask makes them unattractive and 169 (41.02%) feel they don't need to wear a face mask for other people should take care of themselves. (Table 3)

### *Practice of drivers about wearing a mask to prevent transmission of COVID-19.*

Only 59 (14.32%) of the participants reported always wearing face masks properly when working or driving. The majority of respondents 59 (14.32%) reported wearing their face masks by the order of security officer (traffic police). Most of the participants 307 (74.51%) don't always wash their hands

before wearing a face mask while 121 (29.37%) of respondents never wash their hands after removing a face mask. Regarding the removal practice of the respondents, more than half of drivers 289 (70.15%), hold both ear loops and lift and remove the face mask. Nevertheless, 38 (9.22%) drivers admitted sharing a face mask with other people. The type of face mask usually used is reported chronologically in order as Surgical/medical face mask 254 (61.65%), then cloth face mask 145 (35.19%) and N95 face mask 13 (3.16%). When wearing a face mask more than half of the respondents 356 (86.41%) admitted keeping the used face mask in their pocket for later use. Related to this 146 (35.43%) of the participants reported using a single-use facemask 3 times while a greater number of 172 (41.75%) study subjects uses for more than 3 times. (Table 4) Regarding disposal of the used masks, 192 (47.2%) use open fields, 25 (6.1%) of the participants burn, only 135 (33.2%) of them put the masks in a pit or bin. (Figure 2)

### *Behavioral factors affecting face mask wearing.*

The majority of respondents 308 (74.76%) believed that COVID-19 is a punishment from GOD, and 253 (61.41%) of them reported that they do not fear COVID-19. A higher proportion of the respondents 220 (53.4%) feel vulnerable to catching COVID-19. Regarding the accessibility of face masks, most of the respondents 344 (83.5%) reported that there is no difficulty in the availability of face masks, and 344 (83.5%) of them believe that the purchase cost of face masks



**Table 3.** Attitudes of drivers about COVID-19 working at Gondar Town, Ethiopia.

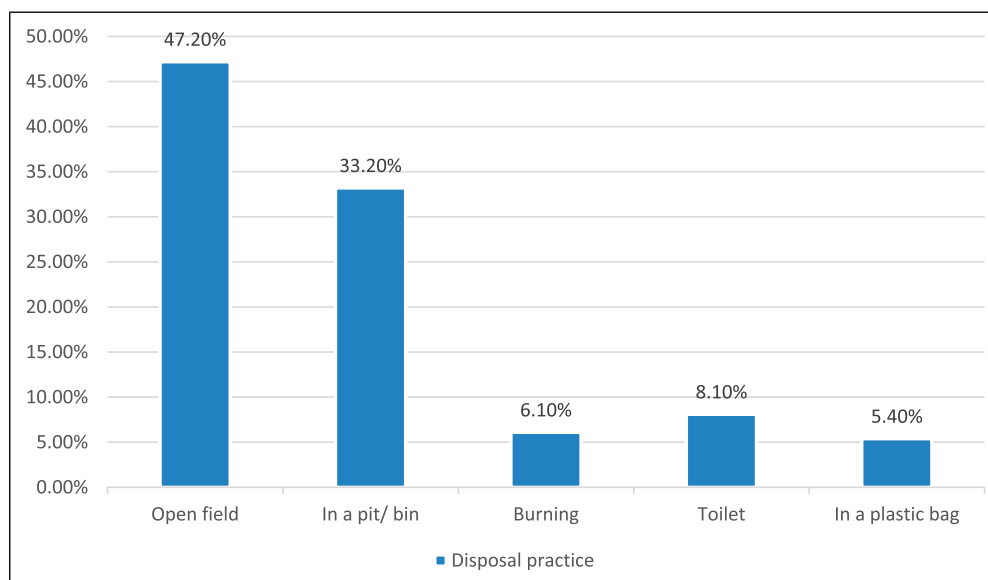
Variables	Categories	n (%)
A cloth face mask is as effective as a regular surgical face mask or N95 in limiting the spread of COVID19	Agree	104 (25.24%)
	Neutral	168 (40.78%)
	Disagree	140 (33.98%)
It's difficult for others to see my facial expressions when wearing a face mask	Agree	253 (61.41%)
	Neutral	82 (19.9%)
	Disagree	77 (18.69%)
People will misinterpret my feelings when wearing a face mask	Agree	195 (47.33%)
	Neutral	120 (29.13%)
	Disagree	97 (23.54%)
I Feel embarrassed when wearing a face mask	Agree	59 (14.32%)
	Neutral	74 (17.96%)
	Disagree	279 (67.72%)
Wearing a face mask makes me unattractive	Agree	64 (15.53%)
	Neutral	79 (19.17%)
	Disagree	269 (65.29%)
The appearance of face mask is unpleasant	Agree	147 (35.68%)
	Neutral	85 (20.63%)
	Disagree	180 (43.69%)
I have breathing difficulty when wearing a face mask	Agree	289 (70.15%)
	Neutral	39 (9.47%)
	Disagree	84 (20.39%)
Face mask irritates my face	Agree	253 (61.41%)
	Neutral	39 (9.47%)
	Disagree	120 (29.13%)
Face mask causes ear pain	Agree	258 (62.62%)
	Neutral	24 (5.83%)
	Disagree	130 (31.55%)
I don't need to wear a face mask; other people should take care of themselves	Agree	169 (41.02%)
	Neutral	43 (10.44%)
	Disagree	200 (48.54%)
I Feel embarrassed when wearing a face mask	Agree	59 (14.32%)
	Neutral	74 (17.96%)
	Disagree	279 (67.72%)
People will misinterpret my feeling when I wear a face mask	Agree	97 (23.54%)
	Neutral	120 (29.13%)
	Disagree	195 (47.33%)
I have breathing difficulty when I wear a face mask	Agree	289 (70.15%)
	Neutral	39 (9.45%)
	Disagree	84 (20.39%)
Wearing a face mask makes me unattractive	Agree	268 (65.05%)
	Neutral	79 (19.17%)
	Disagree	64 (15.53%)

is not expensive. About 219 (53.16%) of the participants do not think the government pressurize them or feel enforced into wearing a face mask. More than half of them perceive neither family members 237 (57.52%), nor passengers 356

(86.41%) encourage them to wear a face mask. About 235 (57.04%) of the study participants do not think wearing face masks acceptable in their working area. (Table 5)

**Table 4.** Practice of drivers about COVID-19, Gondar, Ethiopia.

Variables	Categories	n (%)
Do you always wear a face mask when working/driving?	Yes	59 (14.32%)
	No	353 (85.68%)
If your answer to the above question was “No”, how often do you were a face mask?	By passengers	21 (5.1%)
	Myself	72 (17.48%)
	Security officer (traffic police)	166 (40.29%)
	Only when coughing	77 (18.69%)
	A passenger in the car	38 (9.22%)
	All	38 (9.22%)
What type of face mask do you usually use/wear?	Surgical/medical face masks	254 (61.65%)
	N95 face masks	13 (3.16%)
	Cloth face masks	145 (35.19%)
Do you always wash your hands before wearing a face mask?	Yes	105 (25.48%)
	No	307 (74.51%)
Do you always check the inside and outside of the face mask before wearing it?	Yes	219 (53.16%)
	No	193 (46.84%)
How do you wear a face mask?	Cover the mouth only	47 (11.41%)
	Cover the nose only	30 (7.28%)
	Cover the chin	14 (3.4%)
	Cover the mouth, nose, and chin	321 (77.91%)
Do you frequently touch the face mask with your hands after wearing it?	Yes	249 (60.44%)
	No	183 (44.42%)
Do you wash your hands with soap and water/use a sanitizer after touching the face mask?	Yes	180 (43.69%)
	No	232 (56.31%)
How often do you wash your hands after removing a face mask?	Never	121 (29.37%)
	Sometimes	225 (54.61%)
	Usually	53 (12.86%)
	Always	13 (3.16%)
How do you remove a face mask? (Please select your most common method)	Touching the front of the mask to remove the face mask	123 (29.85%)
	Hold both ear loops and lift and remove the face mask	289 (70.15%)
Do you share a face mask with other people	Yes	38 (9.22%)
	No	374 (90.78%)
Do you keep a used face mask in your pocket/bag for later use?	Yes	356 (86.41%)
	No	56 (13.59%)
How long do you use a single-use face mask?	Only once (for a single day)	64 (15.53%)
	For 2 times	30 (7.28%)
	Three times	146 (35.43%)
	>3 times	172 (41.75%)
Does the driver wear a face mask?	Yes	25 (6.07%)
	No	387 (93.93%)
Does he/she wear the face mask correctly (not reverted, covering the nose, mouth, and chin fully)	Yes	17 (4.13%)
	No	395 (95.87%)



**Figure 2.** Face mask disposal practice of the study participants.

### Factors affecting respondents' knowledge towards facemask use

A bivariate and multivariate logistic regression analysis were conducted to assess factors associated with patients' knowledge towards face mask use amid the COVID-19 pandemic. The results showed that the educational level of the respondents and their family size were the only factors that were significantly associated with the respondent's knowledge ( $P \leq .05$ ). Drivers that had a diploma level of education were found to be 87.7% less knowledgeable than degree holders (AOR .123, 95% CI = .026, .573), and preparatory level drivers 88.5% (AOR .115, 95% CI = .025, .534), high school level 91.4% (AOR .086, 95% CI = .019, .384) and elementary level drivers 89.3% (AOR .107, 95% CI, = .022, .525) less knowledgeable than their degree level counterparts respectively. (Table 6)

On the other hand, drivers with a family size of 5-10 were found to be 1.6 times more knowledgeable than those with less than 5 household sizes (AOR = 1.638, 95% CI = 1.050, 2.556). (Table 6)

### Factors Affecting Respondents' Attitude Towards Facemask Use

Driver's knowledge and age were significantly associated with their attitude towards facemask use ( $P < .05$ ). Respondents that had good knowledge about COVID-19 and face masks were found to have 1.7 factors affecting respondents' knowledge times more positive attitudes than those that had poor knowledge (AOR=1.728, 95% CI = 1.150, 2.596). Similarly, drivers within the age of 36-45 years were found to

have 54.8% less positive attitudes than their 18-25 years counterparts (AOR=.452, 95% CI = .246, .831). (Table 7)

### Factors Affecting Respondents' Practice Towards Facemask Use

The regression analysis showed that drivers whose family members have ever been caught by COVID-19 were found 2 times more likely to use face masks whenever they are working/driving (AOR = 2.173, 95% CI = 1.015, 4.652) than their counterparts. Similarly, drivers with good knowledge about COVID-19 and the importance of face masks were found twice more likely to use face masks during their working hours than those with poor knowledge (AOR=2.052, 95% CI = 1.163, 3.621). (Table 8)

### Discussion

COVID-19 has been an ongoing global threat.<sup>26-29</sup> The world is still under constant waves of uncertainties leaving drivers at even higher risks on daily basis than the general population.<sup>30,31</sup> The risk of contracting the disease among drivers gives further enhanced if it is accompanied by poor attitude, knowledge, and practices of PPE especially face masks. Hence, in order to mitigate the spread of this infection this cross-sectional study was conducted to assess the knowledge, attitude, and practice (KAP) face mask utilization and additional behavioral factors that affect face mask wearing among public transport drivers (Taxi, Bajaj, Public service bus, Long-run bus, and Long-run minibus) in urban areas of Gondar town.

Given the increasing evidence of the efficacy of COVID-19 preventive measures,<sup>32-35</sup> warranting community compliance

**Table 5.** Behavioral factors affecting face mask wearing from drivers, Gondar, Ethiopia.

Variables	Categories	n (%)
Do you feel COVID-19 is a punishment from GOD?	Yes	308 (74.76%)
	No	53 (12.86%)
	Uncertain	51 (12.38%)
Do you feel COVID-19 is a bio-hazardous attack manufactured in a lab.?	Yes	25 (6.07%)
	No	195 (47.33%)
	uncertain	192 (46.6%)
Do you feel as you are vulnerable to catching COVID-19?	Yes	220 (53.4%)
	No	159 (38.6%)
	uncertain	33 (8.0%)
Do you fear COVID-19?	Yes	131 (31.8%)
	No	253 (61.41%)
	uncertain	28 (6.8%)
Do you face difficulty in obtaining a face mask? (availability)	Yes	57 (13.83%)
	No	344 (83.5%)
	uncertain	11 (2.67%)
Do you feel that face masks are expensive?	Yes	181 (43.93%)
	No	215 (52.18%)
	uncertain	16 (3.88%)
Do you face discomfort when wearing a face mask?	Yes	305 (74.03%)
	No	101 (24.51%)
	uncertain	6 (1.46%)
Do you feel being pressurized by the government to wear a face mask?	Yes	175 (42.48%)
	No	219 (53.16%)
	uncertain	18 (4.37%)
Do your family members encourage you to wear a face mask?	Yes	158 (38.35%)
	No	237 (57.52%)
	uncertain	17 (4.13%)
Do passengers encourage you to wear a face mask?	Yes	47 (11.41%)
	No	356 (86.41%)
	uncertain	9 (2.18%)
Is wearing a face mask acceptable in your working area?	Yes	117 (28.4%)
	No	235 (57.04%)
	uncertain	60 (14.56%)

with these preventive measures remains of vital importance.<sup>36</sup> The current study revealed that the overall average knowledge, attitude and practice proportions of drivers were low. This finding was a bit lower than a similar study conducted in Dessie and Kombolcha,<sup>37</sup> Addis Ababa,<sup>38</sup> and Hossana.<sup>23</sup>

Proper use of face masks by healthcare and non-healthcare workers can lower the risk of respiratory virus infection by 80%.<sup>39</sup> In the present study, only 59 (14.32%) of the respondents reported always wearing face masks properly when working or driving. The majority of respondents 166 (40.29%) reported wearing their face masks by the order of security officer (traffic police). In a similar study conducted in Dessie and Kombolcha towns, the

proportion of taxi drivers that wear a face mask was 54.68%.<sup>37</sup> This could be due to better access to PPE in Dessie and Kombolcha towns, and/or due to strict regulations in these towns as they are the major business routes in the country and with strict security regulations. Similarly, the overall utilization of face masks was higher in studies conducted in Hong Kong,<sup>40</sup> Addis Ababa,<sup>38</sup> Malaysia,<sup>36</sup> Dessie,<sup>41</sup> and Saudi Arabian,<sup>42</sup> than in the current study.

A study conducted in Dessie and Kombolcha revealed that the majority of the drivers were using cloth face masks, followed by N95,<sup>37</sup> while in the current study surgical mask was the commonest type of mask used. Similarly, the majority of the respondents were wearing

**Table 6.** Bivariate and multivariate logistic regression of knowledge of public transport drivers towards face masks and associated factors in Gondar, 2021 (N=412).

Variables	Knowledge towards Face Mask		COR (CI=95%)	P-Value	AOR (CI=95%)	P-Value
	Good	Poor				
<b>Gender</b>						
Male	180	208	1	—	1	—
Female	16	8	2.311 (.966, 5.527)	.060	2.154 (.830, 5.591)	.115
<b>Age</b>						
18-25	43	46	1	—	1	—
26-35	95	91	1.117 (.674, 1.851)	.668	1.166 (.650, 2.091)	.607
36-45	45	56	.860 (.485, 1.523)	.604	1.144 (.543, 2.410)	.724
46-55	11	18	.654 (.277, 1.541)	.331	.690 (.235, 2.024)	.499
>55	2	5	.428 (.079, 2.323)	.325	.276 (.034, 2.246)	.229
<b>Religion</b>						
Orthodox	110	137	1	—	1	—
Muslim	65	60	1.349 (.876, 2.077)	.174	1.320 (.822, 2.120)	.250
Catholic	2	1	2.491 (.223, 27.832)	.459	1.830 (.131, 25.605)	.653
Protestant	18	18	1.245 (.619, 2.508)	.539	.856 (.390, 1.881)	.699
Jewish	1	0	20.349 (.021, 2.032)	.978	20.124 (.032, 2.001)	.999
<b>Marital status</b>						
Single	86	72	1	—	1	—
Married	88	118	.624 (.411, .948)	<b>.027*</b>	.685 (.410, 1.145)	.149
Widowed	6	8	.628 (.208, 1.894)	.409	.522 (.144, 1.888)	.322
Divorced	16	18	.744 (.354, 1.564)	.436	.747 (.318, 1.757)	.504
<b>Educational level</b>						
No formal education	5	1	.556 (.041, 7.457)	.657	.462 (.034, 6.288)	.562
Elementary	21	21	.111 (.023, .540)	<b>.006*</b>	.107 (.022, .525)	<b>.006*</b>
High school	79	114	.077 (.017, .341)	<b>.001*</b>	.086 (.019, .383)	<b>.001*</b>
Preparatory	36	39	.103 (.022, .473)	<b>.004*</b>	.114 (.025, .532)	<b>.006*</b>
Diploma	37	39	.105 (.023, .486)	<b>.004*</b>	.123 (.026, .571)	<b>.007*</b>
Degree	18	2	1	—	1	—
<b>Family size</b>						
<5	106	145	1	—	1	—
5-10	79	59	1.840 (01.210, 2.798)	<b>.004*</b>	1.638 (1.050, 2.556)	<b>.030*</b>
>10	10	10	1.374 (.552, 3.417)	.495	1.332 (.524, 3.385)	.547
<b>Driving experience in years</b>						
<5	135	144	1	—	1	—
5-10	53	63	.897 (.581, 1.385)	.625	.805 (.463, 1.399)	.442
>10	8	9	.948 (.356, 2.529)	.915	1.322 (.347, 5.033)	.682

N.B. \*= $P$ -value<.05, COR=Crude Odds Ratio; AOR= Adjusted Odds Ratio.

**Table 7.** Bivariate and multivariate logistic regression of attitude of public transport drivers towards face mask use and associated factors in Gondar, 2021 (N=412).

Variables	Attitude towards Face Mask		COR (CI=95%)	P-Value	AOR (CI=95%)	P-Value
	Positive	Negative				
<b>Gender</b>						
Male	149	239	1	—	1	—
Female	11	13	1.357 (.593, 3.108)	.470	.937 (.366, 2.403)	.893
<b>Age</b>						
18-25	41	48	1	—	1	—
26-35	79	107	.864 (.520, 1.437)	.574	.849 (.508, 1.418)	.532
36-45	28	73	.449 (.246, .821)	<b>.009*</b>	.452 (.246, .831)	<b>.011*</b>
46-55	12	17	.826 (.354, 1.930)	.660	.872 (.370, 2.055)	.755
>55	0	7	.002 (.001, .005)	.999	.002 (.001, .005)	.999
<b>Religion</b>						
Orthodox	89	158	1	—	1	—
Muslim	52	73	1.265 (.814, 1.964)	.296	1.119 (.691, 1.811)	.648
Catholic	2	1	3.551 (.317, 39.709)	.304	1.713 (.125, 23.420)	.687
Protestant	16	20	1.420 (.700, 2.880)	.331	1.558 (.710, 3.418)	.269
Jewish	1	0	28.65 (.001, 38.75)	.987	23.89 (.012, 38.542)	.099
<b>Marital status</b>						
Single	61	97	1	—	1	—
Married	75	131	.910 (.593, 1.397)	.667	1.428 (.841, 2.425)	.187
Widowed	5	9	.883 (.283, 2.760)	.831	1.083 (.277, 4.232)	.908
Divorced	19	15	2.014 (.952, 4.259)	.067	2.904 (1.213, 6.953)	.017
<b>Educational level</b>						
No formal education	3	3	1	—	1	—
Elementary	15	27	.556 (.099, 3.103)	.503	1.275 (.152, 10.688)	.823
High school	70	123	.569 (.112, 2.896)	.497	1.363 (.178, 10.441)	.765
Preparatory	38	37	1.027 (.195, 5.418)	.975	2.564 (.325, 20.207)	.371
Diploma	24	52	.462 (.087, 2.456)	.365	1.240 (.153, 10.034)	.840
Degree	10	10	.998 (.161, 6.200)	.999	1.868 (.207, 16.884)	.578
<b>Family size</b>						
<5	94	160	1	—	1	—
5-10	56	82	1.162 (.760, 1.777)	.487	1.079 (.644, 1.808)	.773
>10	10	10	1.702 (.683, 4.240)	.253	1.257 (.437, 3.614)	.672
<b>Driving experience in years</b>						
<5	107	172	1	—	1	—
5-10	49	67	1.176 (.757, 1.826)	.472	1.444 (.826, 2.521)	.197
>10	4	13	.495 (.157, 1.556)	.229	.858 (.207, 3.550)	.832
<b>Knowledge about COVID-19 and mask use</b>						
Poor	70	146	1	—	1	—
Good	90	106	1.771 (1.187, 2.642)	<b>.005*</b>	1.728 (1.150, 2.596)	<b>.008</b>

N.B. \*= $P$ -value<.05, COR=Crude Odds Ratio; AOR= Adjusted Odds Ratio.

**Table 8.** Bivariate and multivariate logistic regression of face mask use and associated factors of public transport drivers in Gondar, 2021 (N=412).

Variables	Always Wear Face Mask when Driving		COR (CI=95%)	P-Value	AOR (CI=95%)	P-Value
	Yes	No				
<b>Gender</b>						
Male	55	333	1	—	1	—
Female	4	20	1.211 (.399, 3.677)	.736	.848 (.190, 3.791)	.830
<b>Age</b>						
18-25	8	81	1	—	1	—
26-35	28	158	1.794 (.782, 4.115)	.167	1.684 (.635, 4.462)	.295
36-45	17	84	2.049 (.838, 5.010)	.116	2.983 (.831, 10.700)	.094
46-55	6	23	2.641 (.832, 8.387)	.099	1.508 (.201, 11.331)	.690
>55	0	7	.002 (.001, 2.124)	.999	.002 (.001, 2.452)	.999
<b>Religion</b>						
Orthodox	36	211	1	—	1	—
Muslim	16	109	.860 (.457, 1.620)	.641	.804 (.371, 1.742)	.580
Catholic	1	2	2.931 (.259, 33.166)	.385	6.420 (.316, 130.236)	.226
Protestant	6	30	1.172 (.456, 3.016)	.742	.562 (.169, 1.865)	.346
Jewish	0	1	.002 (.001, 3.214)	.988	.004 (.001, 2.548)	.999
<b>Marital status</b>						
Single	23	135	1	—	1	—
Married	27	179	.885 (.486, 1.612)	.690	.553 (.242, 1.264)	.160
Widowed	4	10	2.348 (.679, 8.121)	.178	3.104 (.582, 16.560)	.185
Divorced	5	29	1.012 (.355, 2.883)	.982	.488 (.108, 2.201)	.350
<b>Educational level</b>						
No formal education	1	5	1	—	1	—
Elementary	8	34	1.176 (.120, 1.513)	.889	3.173 (.175, 57.391)	.434
High school	21	172	.610 (.068, 5.478)	.659	2.150 (.129, 35.860)	.594
Preparatory	9	66	.682 (.071, 6.515)	.739	2.466 (.138, 44.023)	.539
Diploma	14	62	1.129 (.122, 10.437)	.915	4.628 (.252, 85.014)	.302
Degree	6	14	2.143 (.204, 22.478)	.5—25	8.140 (.401, 165.344)	.172
<b>Family size</b>						
<5	32	222	1	—	1	—
5-10	24	114	1.461 (.822, 2.597)	.197	1.188 (.506, 2.787)	.692
>10	3	17	1.224 (.340, 4.413)	.757	.898 (.153, 5.271)	.905
<b>Type of car driving</b>						
Bajaj	25	168	1	—	1	—
Taxi	28	139	1.354 (.755, 2.428)	.310	1.949 (.836, 4.541)	.122
Public service bus	0	9	.002 (.001, 1.025)	.999	.003 (.001, 2.014)	.999
Long run minibus	1	20	.336 (.043, 2.615)	.298	.185 (.011, 2.965)	.233
Long run bus	5	17	1.976 (.670, 5.832)	.217	2.478 (.411, 14.939)	.322
<b>Driving experience in years</b>						
<5	41	238	1	—	1	—
5-10	13	103	.733 (.377, 1.425)	.359	.599 (.241, 1.490)	.270
>10	5	12	2.419 (.809, 7.227)	.114	6.332 (.869, 46.120)	.069

(continued)

**Table 8.** (continued)

Variables	Always Wear Face Mask when Driving		COR (CI=95%)	P-Value	AOR (CI=95%)	P-Value
	Yes	No				
<b>Owner of the vehicle driving</b>						
Own vehicle	15	81		—		—
Government	4	23	.939 (.284, 3.106)	.918	.990 (.239, 4.106)	.989
Another private owner	40	249	.867 (.455, 1.652)	.665	.904 (.429, 1.905)	.791
<b>Monthly income in ETB**</b>						
<1000	2	6		—		—
1000-5000	39	227	.515 (.100, 2.646)	.427	.400 (.056, 2.837)	.359
5001-10 000	18	111	.486 (.091, 2.600)	.399	.215 (.027, 1.724)	.148
>10 000	0	9	.002 (.001, 1.256)	.999	.002 (.001, 1.254)	.998
<b>Presence of chronic diseases</b>						
Yes	8	27		—		—
No	51	326	.528 (.227, 1.226)	.137	.586 (.201, 1.703)	.326
<b>Presence of chronic diseases in the family</b>						
Yes	11	46		—		—
No	48	307	.654 (.317, 1.350)	.251	.575 (.230, 1.436)	.236
<b>Ever been caught be COVID-19</b>						
Yes	4	46		—		—
No	55	307	2.060 (.713, 5.954)	.182	2.865 (.760, 10.803)	.120
<b>Family members ever been caught by COVID-19</b>						
Yes	11	31	2.380 (1.122, 5.048)	<b>.024*</b>	2.173 (1.015, 4.652)	<b>.046*</b>
No	48	322		—		—
<b>Provision of face mask by the vehicle owner</b>						
Yes	8	41		—		—
No	51	312	.838 (.371, 1.889)	.670	.716 (.281, 1.823)	.483
<b>Vaccinated against COVID-19</b>						
Yes	5	27		—		—
No	54	326	.894 (.330, 2.424)	.826	.728 (.213, 2.493)	.614
<b>Knowledge about COVID-19 and mask use</b>						
Poor	22	194		—		—
Good	37	159	2.052 (1.163, 3.621)	<b>.013*</b>	2.052 (1.163, 3.621)	<b>.013*</b>
<b>Attitude towards COVID-19 and mask use</b>						
Negative	34	218		—		—
Positive	25	135	1.187 (.679, 2.077)	.547	1.357 (.695, 2.648)	.372

N.B. \*= $P$ -value<.05; ETB=Ethiopian Birr (1ETB=1/50USD); COR=Crude Odds Ratio; AOR= Adjusted Odds Ratio.



medical face masks in Malaysia,<sup>43</sup> and Hong Kong.<sup>44</sup> This could be attributed to the knowledge differences among drivers in the 2 study areas and/or affordability issues because there are price differences on face masks in different areas in the country. Cloth face masks are usually hand-made (at home), while surgical face masks are available on purchase. This could have an impact on the type of face mask to use.

In the present study, about 12.14% of the drivers reported that they have been caught by COVID-19. This is very worrying given the number of people they would have in contact with and their attitude towards implementing preventive measures. It can be referred that only 7.77% of them are vaccinated and almost two-thirds of them (63.11%) believe that wearing a face mask will not protect them from Covid-19.

A study in the USA where face mask wearing significantly improved from 41% to 90% among some groups following government pressure.<sup>45</sup> In the current study, about 53.16% of the participants do not think the government pressurize them or feel enforced into wearing a face mask. However, this was opposite to the finding in Dessie and Kombolcha towns in which almost three-fourths (72.2%) of the taxi drivers felt that the presence of local government pressure helped them to wear a face mask.<sup>37</sup> Moreover, this finding is also inconsistent with studies conducted in Japan,<sup>46</sup> Hong Kong,<sup>47</sup> and Mexico City public transportation during the influenza outbreak.<sup>48</sup> This could be a sign of a lower level of commitment from the responsible government agencies in Gondar town. Although the drivers should take the responsibility of wearing a face mask by themselves without any pressure, amid the degree of the risk and related consequences, the local government should take stringent measures to ensure proper utilization of PPE's among public transport drivers in Gondar town. In general, compared to the study conducted in Dessie and Kombolcha,<sup>37</sup> this study revealed a higher score of knowledge, but lesser degree of attitude and practice towards face mask utilization.

Drivers with good knowledge about COVID-19 and the importance of face masks were found twice more likely to use face masks during their working hours than those with poor knowledge (AOR=2.052, 95% CI = 1.163, 3.621). This finding is consistent with a study conducted in Wachemo.<sup>23</sup> This could be due to a lack of understanding, and those students with good knowledge would try to use the face mask properly. The diverse study demographics, sample size determination, and operational definition could all play a role in this disparity.

## Conclusion

The utilization pattern of face masks among public transport drivers in Gondar town was found to be inadequate. A very low level of vaccination status and poor attitude towards the implementation of personal protective measures was also

revealed. Authorities in areas that are in danger of a COVID-19 pandemic should plan and implement public awareness and education initiatives.

## Limitations of the Study

The lack of sufficient literature to compare the results with was the major limitation of the study. The other limitation of the study is the study design itself in which the study was a cross-sectional study that captures data points at a given time and hence might not be accurate as time progresses. Respondent bias could also be noted.

## Recommendation

Based on the study findings, to improve driver's knowledge, attitude, and practice as well as to mitigate the spread of COVID-19, the following measures are recommended:

- (1) Periodic reinforcement and training/orientation programs for all levels of drivers for adherence with appropriate knowledge, attitude, and use of face mask during his or her working or driving time through the respective Driver's Association
- (2) Awareness creation campaigns in co-operations with local FMs and Gondar Health Office.
- (3) Proper reinforcement measures from local government bodies to strictly monitor the practice of mask-wearing.

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