

# An examination of the Health Status and Healthcare Seeking Behaviour of Public Taxi Drivers in Jamaica during the Coronavirus disease 19 (COVID-19) pandemic

**Paul Andrew Bourne<sup>1</sup>, Kemone Allen<sup>2</sup>, Stacyann Morgan<sup>2</sup>,  
Laurel Thompson<sup>2</sup>, Shanice Vernon<sup>2</sup>, James Fallah<sup>3</sup>,  
Calvin Campbell<sup>4</sup>, Clifton Foster<sup>5</sup>, Caroline McLean<sup>2</sup>**

<sup>1</sup>*Department of Institutional Research, Northern Caribbean University,  
Mandeville, Manchester, Jamaica, WI.*

<sup>2</sup>*Department of Nursing, Northern Caribbean University, Mandeville,  
Manchester, Jamaica, WI.*

<sup>3</sup>*Department of Dental Hygiene, Northern Caribbean University,  
Mandeville, Manchester, Jamaica, WI.*

<sup>4</sup>*Department of Mathematics and Engineering, Northern Caribbean University,  
Mandeville, Manchester, Jamaica, WI.*

<sup>5</sup>*Department of Biology, Chemistry, and Environmental Sciences,  
Northern Caribbean University, Mandeville, Manchester, Jamaica, WI.*

## Abstract

**Background:** At the start of the Coronavirus disease 19 (COVID-19) pandemic, the first reported case in Jamaica was on March 10, 2020. Since the occurrence of COVID-19, many sectors of society such as taxi operators have been adversely affected.

**Objective:** This research aimed to determine the health status and health-seeking behavior of taxi operators in Jamaica during the COVID-19 pandemic.

**Methods:** A series of questions were created in Google Forms and distributed to 501 participants from the 14 parishes in Jamaica. The quantitative data conversion occurred using IBM Statistical Packages for the Social Sciences (SPSS) for Mac, version 27.

**Results:** The current study showed that 65.10% (n=326) of respondents deemed it necessary to seek health care during the pandemic. However, 53.70% (269) of respondents did not have health insurance. The research showed that of the known non-communicable diseases, asthma (a respiratory illness), was the highest prevalence 13.40% (67) and 25.70% (129) of respondents are unaware of their health condition. To better manage their health status, 62.10% (311) of respondents mentioned that they and their passengers wear a face mask; in contrast, 34.1% (171) have

not yet decided on a strategic measure to improve their health and well-being. In addition, 63.5% (318) respondents said that they visit a Medical Practitioner only when they are ill. Thus, the model of health-seeking behavior is a significant one ( $\chi^2=5.871$ ),  $P<0.209$ ) with the prediction that most taxi drivers' general health status is in good shape, and this has no correlation with gender.

**Conclusions:** The need for health promotion is vital, and the research results suggest that taxi drivers realize that their health is their responsibility. With more significant efforts and better health promotion, taxi operators' health status will remain stable as they seek optimum health.

**Keywords:** COVID-19, health, health status, healthcare, health seeking, behaviors, public taxi operators.

## Introduction

The phrase "The greatest wealth is health" (United Nations Environment Programme, 2016) aptly summarizes the importance of health in human existence. Taxi operators are the primary providers of transport for those who depend on public transportation. Since the occurrence of the unprecedented coronavirus in Jamaica in March 2020, taxi operators were among those deeply affected by this pandemic. One ongoing risk for taxi operators is exposure to individuals with the coronavirus disease. Consequently, taxi operators' health status and health-seeking behaviors are declining because there is little or no emphasis on their well-being. Furthermore, the Minister of Health & Wellness threatened taxi operators with sanctions following the news of nurses being left stranded due to fears of contracting COVID-19. Amid the pandemic, taxi operators run the risk of license confiscation if they refuse to transport these individuals (The Gleaner, 2020).

According to the Gleaner (2020), Minister Tufton stated that the taxi drivers are "an important part of economic activity and an important interface with the general populace." He also added that they are an essential part of the front line of the COVID response. Considering this fact, has the government considered these taxi operators' current general health status and health-seeking behavior in Jamaica? A literature search revealed an article published in The Gleaner in October 2020, addressing this question. It noted that "The supportive business personnel of Mandeville, Manchester, took the initiative to promote a healthy lifestyle to these individuals." Of the 400 individuals targeted, 240 were taxi operators, and approximately 80% were hypertensive patients. There is a need for assistance regarding taxi operators' health status based on previous evidence and for the past eight months (The Gleaner, 2020).

This research aims to prove that the health status and healthcare-seeking behavior of taxi operators' are declining as the virus progresses. To confirm this claim, the researchers will first seek to answer these questions: 1) what is the general health status of public transport drivers in Jamaica during the COVID-19 pandemic? 2) What is the healthcare-seeking behavior of taxi

drivers/public transport drivers in Jamaica during the COVID-19 pandemic? and 3) does the general health status of taxi drivers/ public transport drivers in Jamaica during the COVID-19 pandemic influence their healthcare-seeking behavior? The study was conducted in the form of a survey to get an adequate response from these individuals through the health belief model to alter behavioral changes using educational interventions and guidelines that govern health care practices. ("How the Health Belief Model Influences Your Health Choices," 2021). A search of the literature will help in establishing the current information that exists on this topic.

## Literature Review

COVID-19 has changed the healthcare-seeking behavior of taxi operators and other public transport operators across the globe. The operators of public transports-vehicles indicated that they were concerned about their health and by developing COVID-19 infections and coinfections (Almlöf, Rubensson, Cebecauer, et al., 2021; Baluja et al., 2021; Brooks et al., 2021; Cui et al., 2021; Junyi, Yoshitsugu, & Lawrence, 2021; Lan et al., 2020; Natnael et al., 2021); Przybylowski et al., 2021; Orozco et al., 2020; Zhang et al., 2021). Studies have demonstrated that taxi operators and other transport operators are at high risk for developing and transmitting diseases (Almlöf et al., 2021; Brooks et al., 2021; Cui et al., 2021; Lan et al., 2020; Przybylowski et al., 2021). Transport operators believe that health policies exist to meet their needs; therefore, they practice health promotion behavior to mitigate disease (Almlöf et al., 2021; Baluja et al., 2021; Brooks et al., 2021; Przybylowski et al., 2021; Zhang et al., 2021).

Some researchers reported that taxi, truck, and bus drivers are at higher risk of developing chronic non-communicable diseases. Health research also shows that taxi work is detrimental to health; common conditions among the workforce include musculoskeletal disorders, kidney disease, and diabetes (Dubinsky et al., 2012; Facey, 2003; Mirpuri et al., 2018). Other studies have shown showed that transport operators are interested in having mechanisms in place for a healthier lifestyle; the provision of rapid and accurate laboratory testing, diagnosis, and treatment (Almlöf et al. (2021); Baluja et al., 2021; Brooks et al., 2021; Przybylowski et al., 2021; Lan et al., 2020; Orozco et al., 2020; Zhang et al., 2021). Nevertheless, public transport operators would like healthcare providers to consider their socioeconomic status when providing health services (Baluja et al., 2021; Brooks et al., 2021; Lan et al., 2020; Natnael et al., 2021; Przybylowski et al., 2021).

Previous research demonstrates the importance of healthcare and health status among taxi drivers and other public transport operators before the COVID-19 pandemic. Results indicated that this population is at high risk for healthcare issues. This current study aims to examine public taxi drivers' health status and healthcare-seeking behaviors since the outbreak of the COVID-19 pandemic.

In June 2017, a health drive organized by Three Angels Pharmacy business operators in Mandeville, Manchester, launched their first mobile clinic to assist individuals in by providing regular checkups (blood pressure checks, etc). Of the 400 participants, 240 were taxi drivers with

chronic hypertension and diabetes who benefited from this health drive, according to Nurse Bailey (Gleaner, 2017). "Many were also pre-diabetic based on their numbers, and they need to be advised on making lifestyle changes in order to correct the current trajectory." The need to get regular checkups amid the pandemic is essential, and therefore appealing to these operators was vital. It was necessary to establish whether the taxi operators were maintaining a healthy lifestyle during this pandemic.

According to researchers and scholars, health-seeking behaviors (HSB) are closely linked to the health status as this influences the nation and economic development (Olawuyi& Adeoye, 2018). The Jamaica Association of Transport Owners and Operators (JATOO) president, Louis Barton, affirmed that most taxi drivers are compliant with the protocols set by the government and health minister. However, there are still a few delinquent participants in the industry. However, there is no documentation on whether taxi operators receive advice on getting regular checkups or how to apply for health insurance during the pandemic (Robyn et al., 2012).

Nevertheless, the influence of health-seeking behavior is an individual choice. health care-seeking behavior is a person's actions to promote maximum well-being, recovery, and rehabilitation. Such activities may occur with or without a range of potential fundamental health concerns (Poortaghi et al., 2015). The health belief model is the theoretical framework applied in this study as it focuses on interventions for those at risk while influencing individuals to apply knowledge and take action. Awareness of healthy lifestyle practices is an essential component in the fabric of society. Some of the health belief model's constructs indicate that the individual plays a vital role in this behavior. This research will add to the body of knowledge by addressing the current state of health behaviors among taxi drivers. The theoretical framework of this study underpins the research question and serves as a guide to aid in the prediction of public taxi drivers' health behaviors. Therefore, a brief discussion of the health belief model will set the foundation for this study.

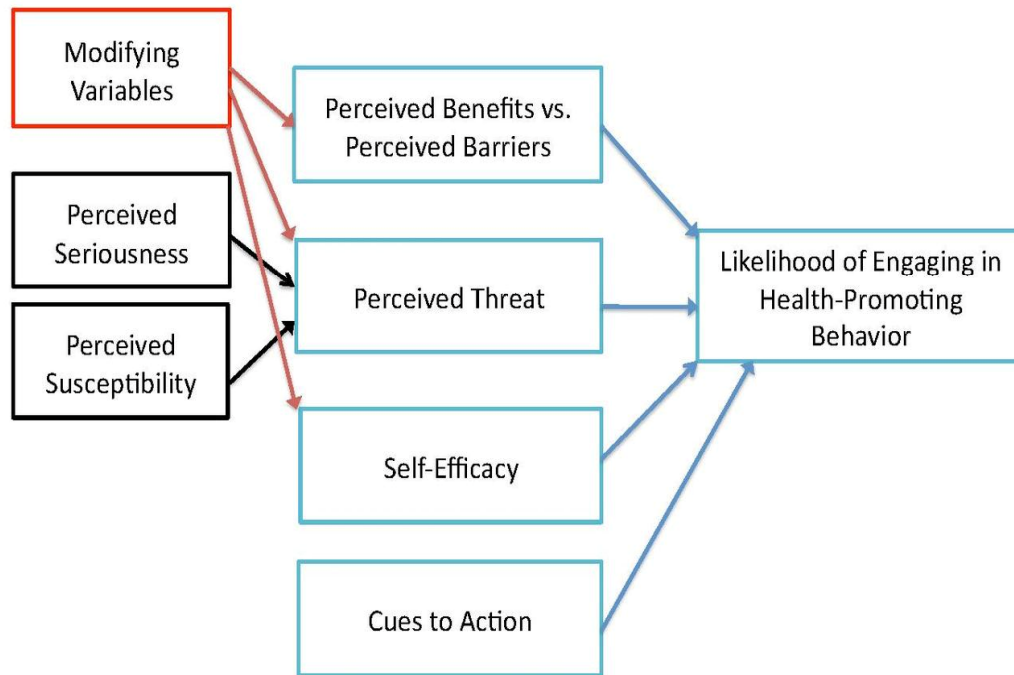
## **Theoretical Framework**

Theories exist because of the need to solve a problem or form an explanation that would account for some repeatedly observed occurrence. The development of a theory involves inductive reasoning and qualitative methods to bring across a specific phenomenon (Mullen & Iverson, 1982; Thomas, 1992). The particular phenomenon for this current study is to investigate the health status and healthcare-seeking behavior of public taxi drivers.

The health belief model is one of the most commonly used theories in health education and health promotion. It is a model developed by social psychologists including Hochbaum, Rosenstock in the early 1950s. It predicts and explains health behaviors and helps to increase health promotion and disease prevention programs. The Health Belief Model (HBM) has six theoretical constructions or key action-related components to aid decision-making to accomplish behavioral changes (Nancy & Becker, 1984; Siddiqui et al., 2016). These components are perceived severity, perceived susceptibility, perceived benefits, perceived barriers, cue of action,

and self-efficacy. These stages will take place through long-term interventions by researchers and scholars and will apply to this study to ensure that the health-seeking behaviors continue to reduce.

## The Health Belief Model



Source: Ulrich (u.d ).

**Figure 1. Diagram showing Health Belief Model construction**

### Methods

This research employed an associational cross-sectional research design, using a non-probability technique (convenience sampling) to evaluate public taxi drivers/operators' current health status and healthcare-seeking behavior during the COVID-19 pandemic. Researchers used a standardized survey to collect information from 501 public taxi drivers across the 14 parishes in Jamaica (Kingston, St. Andrew, St. Thomas, Portland, St. Mary, St. Ann, Trelawny, St. James, Hanover, Westmoreland, St. Elizabeth, Manchester, Clarendon, and St. Catherine). The survey distribution was via various social media platforms, including WhatsApp, email, Google Form, and through means of reaching out (i.e., text, phone) to these operators and face-to-face interaction. The taxi operators responded to the questions for the face-to-face interaction. An electronic data collection device recorded their responses. Descriptive conjectural statistics were provided background significance on the sample, using SPSS for Windows, Version 25.0. Data analysis was conducted occurred using bivariate (chi-square) methods to give a variable response in frequency and percentage.

## Results

Table 1 depicts the demographic characteristics of data sampled respondents with a minimum of (n=501) participants. Of which 415 (82.80 3%) were males and 856 (17.17%) females, ages ranging from 18 to 57+ years and located in at least seven of the 14 parishes in Jamaica.3

**Table 1. Demographic Characteristics of the Sampled Respondent, n=501**

Details	% (n)
<b>Gender</b>	
Female	17.17 (85)
Male	82.803(415)
<b>Age Cohort</b>	
18-30 years	31.10 (156)
31-43 years	33.30 (167)
44-56 years	27.90 (140)
57+ years	6.80 (34)

A vast number of respondents (65.10%) indicated that they believed in seeking health care during the pandemic (21.80%) potted the borderline by suggesting that it may be necessary to seek medical attention, and the minority (13%) deemed it unnecessary.

**Table 2. Importance of health care seeking during the COVID-19 pandemic**

Details	% (n)
<b>Believed in seeking health care during the pandemic</b>	
Yes/Sometimes	65.10 (326)
No	13.0 (65)
Maybe	21.80 (109)
<b>Knowledge on COVID-19 Virus</b>	
Highly Knowledgeable	30.70 (154)
Lowly Knowledgeable	7.40 (37)
Unsure	8.40 (42)
Not at all	0.60 (3)

Table 3 represents the number of taxi operators who believed they have an underlying condition. 30.70% confirmed a non-communicable disease, while 43.10% indicated no diagnosis. However, a little more than a quarter percent (25.70) are unaware of their health status. Furthermore, this survey has selected asthma (respiratory illness) as the highest-rated illness (13.40%). When asked about health insurance, 53.90% did not own a health insurance policy, while 46.10% did have access to a health insurance coverage However, many were adamant about getting health coverage after continuous health promotion.

**Table 3. Health-related conditions affecting taxi drivers in Jamaica**

Details	% (n)
<b>Believed to have underlying issues</b>	
Yes	30.70 ( 154)
No	43.10 (216)
Not aware	25.70 (129)
<b>Non communicable diseases</b>	
Asthma (respiratory illness)	13.40 (67)
Cardiovascular Disease (Heart and blood vessel disease)	3.20 (16)
Diabetes	6.0 (30)
Hypertension	10.40 (52)
Malignant Neoplasm (cancer-lungs, breast, leukemia, enlarged prostate)	1.80 (3)
<b>Access to Health Insurance</b>	
No	53.90 (269)
Yes	46.10 (230)

Table 4 represents measures taken by the respondent to better their health behaviors during the COVID-19 pandemic.

**Table 4. Measures implemented to manage health Status of Taxi Drivers**

Details	% (n)
<b>Wearing of face masks</b>	
Yes, Always	62.10 (311)
Sometimes	33.70 (169)
No	3.60 (18)
<b>Measures to manage the health status</b>	
Drink adequate water	28.9 (145)
Get regular checkups	33.0 (169)
Have not yet decided	34.1 (171)
Have no intention to check up	2.8 (14)
<b>Medical Practitioner Visits</b>	
Only when ill	63.5 (318)
Once per year	14.80 (74)
Never	1.60 (8)
Every 3 months	20.0 (100)

Table 5 represents drug usage and the deterioration of health status of taxi operators' since the COVID-19 pandemic in (March 2020). Again, 51.90% indicate that they used both pharmaceutical and herbal drugs to control their health, while 16.20% seemingly do not believe in drug usage (medication or herbs).

**Table 5. The uses of drugs and General Health Status of Taxi operators**

Details	% (n)
<b>Usage of Drugs</b>	
Pharmaceutical drugs only	19.80 (99)
Herbal drugs only	12.0 (60)
Both	51.90 (260)
None of the above	16.20 (81)
<b>Deterioration of health since the pandemic</b>	
No	72.90 (365)
Yes	26.30 (132)

**H<sub>0</sub>:** There is no statistical association between the general health status of Jamaican taxi drivers and gender

**H<sub>1</sub>:** There is a statistical relationship between the general health status of Jamaican taxi drivers and gender

Table 6: Presents a cross-tabulation between the general health status and gender of Jamaican taxi drivers. The findings revealed that there is no statistical association between the two aforementioned variables ( $\chi^2_{critical} = 11.143 > \chi^2_{obtained} = 5.871$ ,  $P = 0.209$ ). Hence, we fail to reject the null hypothesis.

**Table 6.A Cross-Tabulation between general health status and gender of respondents, n=501**

Details		Gender		Total	$\chi^2, P$
		Male	Female		
General Health Status	Excellent	58	15	73	5.871, 0.209
		14.00%	17.60%	14.60%	
	Good	199	45	244	
		48.00%	52.90%	48.80%	
	Moderate	125	24	149	
		30.10%	28.20%	29.80%	
	Poor	31	1	32	
		7.50%	1.20%	6.40%	
	Very poor	2	0	2	
		0.50%	0.00%	0.40%	
Total		415	85	500	
		100.00%	100.00%	100.00%	

## Discussion

The health belief model provides some context for this work, and the discussion in this study is anchored by such a theoretical framework. Taxi operators are the backbone for public health workers and persons needing to seek medical attention. This study aimed to determine taxi



operators' health status and health-seeking behavior in Jamaica during the COVID-19 pandemic. Enrolled in this study were 501 participants of which, 82.80% were males, and 17% were females between the ages of 18 to 57+ years which was similar to a study done in Ibadan where the majority of respondents were males with poor health-seeking behavior (Abaraogu et al., 2021).

The current study found that 65.10% deemed it necessary to seek health care during the pandemic. Furthermore, 62.10% of the sampled taxi operators always wear a mask, and only 3% indicated that they do not wear a facial mask. This behavior was indicative of the fear of COVID-19 and feeling pressured by the government to wear a face mask (Ministry of Health and Wellness, 2021). Taxi operators' health-seeking behavior is a significant concern, given their frequently faced health issues. In the current study, 13.40% of respondents indicated being diagnosed with asthma (a respiratory illness), 10.40% with hypertension, 1.8% with malignant neoplasms, and 6.0% with diabetes mellitus, and indicated that these were owing to continuous unhealthy lifestyle practices. The prevalence of those conditions are greater among the Jamaican populace than among public taxi operators with the exception of asthma (Ministry of Health & Wellness, 2018; Institute for health metrics and evaluation, 2019). Furthermore, the current data showed that 43.10% of taxi operators did not have an underlying illness, while some respondents were unaware of their health condition. Comparatively, substantially more Jamaicans indicated good health (84.0%) compared to respondents in this study (Planning Institute of Jamaica (PIOJ) and Statistical Institute of Jamaica (STATIN), 2019). The adherence to prescribed pharmaceutical and herbal treatments by people with chronic diseases, particularly cardiovascular diseases, is an essential element of controlling chronic disease during this pandemic. Some 51.90% of participants use both herbal and pharmaceutical drugs.

In contrast, a study conducted in Ibadan, Nigeria, showed that 32.1% used herbal drugs while 3.1% sought prescribed/ pharmaceutical drugs. More emphasis is placed on drug usage in Jamaica than that of other countries worldwide; however, the issue of poor health-seeking behavior remains (Abaraogu et al., 2021). The current study also revealed that 53.70% of individuals are without health insurance. The low levels of health insurance coverage in this study will result in a significant percentage of the population being solely reliant on the free public health care system majority of the time (Wilks et al., 2008). Having discovered this information, a cross-tabulation table (Table 6) depicted the significance between gender and health-seeking behavior among taxi drivers in Jamaica. Findings suggest that the gender of the taxi operators did not influence health-seeking behavior.

In addressing the pandemic, the Jamaican Ministry of Health and Wellness (Ministry of Health & Wellness, 2021) implemented measures such as wearing face masks, taking vaccines, utilizing hand sanitizer, and other protocols. The need for health promotion is critical, as the data shows. Based on the research data, most taxi drivers seem to be in the perceived susceptible stage of HBM. In this stage, individuals realize that it is incumbent on them to act. With more significant efforts and better health promotion, taxi operators' health status will remain stable as they seek optimum health.

## Conclusion

The health-seeking behavior of our taxi operators in Jamaica remains stable. However, there is an increased need for health promotion to maintain the level of stability. This current research indicated that more taxi operators are unaware of their health status, and some are merely managing non-communicable diseases. To modify this ongoing situation, the HBM provides interventions through education to slow the progression of unhealthy lifestyle practices leading up to the end of the year 2020 and beyond.

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