

Prevalence Of Felt Morbidity In Motorcycle Drivers In The City Of Sincelejo, 2022

José David Vergara Contrera¹, José Hernández Ávila², Fernando Jove Wilches³

¹ Department of Civil Engineering, Universidad de Sucre, Sincelejo, Sucre, Colombia
<https://orcid.org/0000-0003-2799-3711>

² Department of Civil Engineering, Universidad de Sucre, Sincelejo, Sucre, Colombia
<https://orcid.org/0000-0002-7557-9665>

³ Department of Civil Engineering, Universidad de Sucre, Sincelejo, Sucre, Colombia
<https://orcid.org/0000-0002-2080-4036>

Abstract: The modality of motorcycle taxiing in the city of Sincelejo is a phenomenon that has been growing over time; Approximately 20,000 people provide the mototaxi service [1]. This work generates high risks for those who dedicate themselves to this trade, among which is the probability of being involved in traffic accidents, diseases caused by constant exposure to climate change and inadequate conditions for the exercise of their work. Based on this situation, the objective of this study is aimed at determining the prevalence of morbidity perceived by people who work as motorcycle taxi drivers in the city of Sincelejo and identify the behavior of sociodemographic variables. The methodology used is based on a cross-sectional descriptive/prevalence study with a study sample of 30 individuals dedicated to motorcycle taxis, who were participants, through the application of a survey-type questionnaire distributed virtually, using the Google tool. Forms. The results show that the main ailments observed in the individuals surveyed and that are associated with the development of this activity are diabetes, hypertension, kidney disorders, and prostatitis, among others. It can be concluded that most of the people dedicated to motorcycle taxis are from low socio-economic status and carry out this work due to lack of formal employment in the city. The working conditions are not adequate, because these people are exposed during most of the working hours, to various risk factors: physical and biological.

Keywords: mototaxismo, mototaxista, morbidity, Sincelejo

1. INTRODUCTION

The phenomenon of mototaxismo as a work activity began to take shape more than 20 years ago, in many municipalities of the neighboring department of Córdoba and over time, it has gradually spread to 26 of the 32 departments that make up the country, for which it has become a social crossroads, which represents unsuspected repercussions if a solution to this serious problem is not

achieved [2]. Moto-taxiism is a type of informal work, which is generally carried out by the motorcycle owners themselves, to offer individual public transport services for passengers [3]. In the particular case of the city of Sincelejo, it has become a task to which more and more people are joining. This practice is stimulated by the low access to education and the few job opportunities that exist in the city, with the aggravating circumstance that the exercise of this work can be the trigger for various pathologies and effects on the health of those who use it exerts, generating deterioration in the quality of life of individuals.

2. STATEMENT OF THE PROBLEM

With the increase in motorcycles that occurs every day, dedicated to this work on the roads, a greater risk is generated for those who deal with this trade, a greater number of accidents, diseases caused by constant exposure to climatic changes and inadequate conditions for the exercise of their work; all these aspects, which lead to an imbalance in the state of health of people [3].

In terms of the population offering the service, the rise of motorcycle taxis is due to its profitability. Motorcycle taxi drivers have a socioeconomic profile characterized by low levels of education, most of them do not have their own home, they are not affiliated to any contributory health regime and are beneficiaries of government social programs, such as Sisbén [4].

Due to the high exposure to ultraviolet radiation, the transmission of parasites such as lice, traffic accidents and other factors, the practice of motorcycle taxiing can lead to various health effects, representing a serious public health problem, if the large number of people who exercise this labor practice will be considered [5]. Currently, a significant number of people, inhabitants of Sincelejo and its surroundings, carry out this work as a means of livelihood for their families, thereby increasing the levels of morbidity associated with the different diseases that the development of this activity brings with it [6].

3. JUSTIFICATION

Worldwide, there are many countries that have adopted motorcycle taxis in their vehicular system, such as Germany, Peru, Ecuador, Venezuela, Italy, Japan, Spain, Bolivia, Brazil, Colombia, etc., because they allow easy access to areas that are difficult to transit through other modes of transport[3]. In the case of Colombia, the motorcycle taxi service has become the most used illegal mode of transportation by various populations in the country (26 of the 32 departments use it) [2]. According to the Socio-Demographic Study of Motorcycle Users in Colombia, by 2018 there were 2,600,000 motorcycles, of which 450,000 were used as motorcycle taxis [7]. Regarding the city of Sincelejo, during the last six years the phenomenon of motorcycle taxiing has grown at significant rates and with it, a series of positive and negative externalities have originated around this activity[8]. According to official figures from the Secretary of Transportation and Municipal Transit, approximately 20,000 people provide the mototaxi service in Sincelejo [1].

Working conditions are related to safety, health and quality of life at work. Few studies have been found that address the issue of working conditions and health of motorcycle taxi drivers. At present,

the situation of each of these people with respect to the General Social Security System is unknown [3].

Motorcycle taxi drivers must deal daily with the problem of pollution, which causes respiratory illnesses due to suspended particulate matter and gases expelled from exhaust pipes into the air, a product of vehicle combustion [3].

The study of the work process and health is not a recent concern. Since the last century, and due to the changes that the Industrial Revolution generated in workers' health, various scholars identified with the workers' cause began to evaluate its impact on the health of the working population [9]. Hence the importance of linking the health-work-disease process, since other aspects of the lives of working people are also involved and which directly affect the ways in which the population falls ill and dies [10].

In the theory of traditional occupational medicine, this model had and still has a wide domain, it is the medical practice that seeks a unique relationship between work and its consequences on health, both in the case of occupational diseases and in accidents at work, which recognizes as "occupational disease", a unicausal relationship at work, with a mainly compensatory vision [10].

The phenomenon of mototaxismo has not only generated vehicular chaos and an increase in the number of traffic accidents, but according to some studies, it has generated health problems in the individuals who carry out this work. According to the researchers, the most worrying thing is that the main diseases manifest themselves in the medium and long term [6]. It should be noted that in recent years, dermatologists have noticed a significant increase in the number of patients who visit them daily for ailments associated with allergies and diseases of the skin and scalp. The specialist in the treatment and care of the skin, Víctor Isaza Nájera, confirms this: "with regard to allergies or infections caused by helmets in the case of motorcycle taxi drivers, it is considered an occupational dermatosis, which are alterations in the scalp or face, produced by contact of the skin with the helmet." "There are also irritative process diseases, pre-existing skin lesions, acne, dermatitis, seborrheic eczema, dandruff and even the presence of lice has been detected in some patients" [5].

For this research, it is extremely important to consider the concept of health and disease, to analyze the situation - repercussions that mototaxismo has in its habitual practice, in the inhabitants of the city of Sincelejo. Regarding the definition of health, this corresponds to a dynamic concept that has been modified as cultural and social changes have occurred; The definition adopted for Public Health is the one established by the World Health Organization (WHO), promulgated in its founding charter, considering that "health is a state of complete physical, mental and social well-being, and not only the absence of infirmities or diseases" [11]. On the other hand, authors such as Milton Terris, after questioning the concept of health adopted by the WHO, propose a continuous relationship between health and disease, considering optimal health on the one hand and death (especially that which occurs prematurely) as extremes on the other, passing the human being between both poles [12].

4. EXPERIMENTAL DESIGN, MATERIALS AND METHODS

4.1.Type of study

This study is descriptive cross-sectional/prevalence, where the prevalence of diseases that occur in people who work as motorcycle taxi drivers in Sincelejo is studied. They are characterized by being observational and descriptive studies that lack directionality, which aim to estimate the frequency of a disease or characteristic in a sample of a population at a given time, which is why they are also known as prevalence studies. These studies allow estimating the prevalence of a disease in a given population.

Study sample: 30 people dedicated to the work of Mototaxistas.

Accessible population: Motorcycle taxi drivers from the city of Sincelejo.

4.2.Material and Methods

To collect the required information, a sociodemographic survey was carried out. The description of the survey is presented below.

Age: How long a person has lived?

Sex: organic condition, masculine or feminine.

Access to basic services: it is the availability of infrastructure works necessary for a healthy life such as electricity, drinking water, sewage, telephone, among others.

Skin Diseases - Skindiseases are a wide range of conditions that affect the skin and include diseases caused by bacterial infections, viral infections, fungal infections, allergic reactions, skin cancers, parasites, heredity or even its cause may be unknown.

Prostate disease: The prostate is a gland that is part of the male reproductive system. Helps produce semen, the fluid that contains sperm, some of the prostate diseases are: Prostatitis: inflammation, usually caused by bacteria, hyperplasia (BPH or enlarged prostate): a common problem in adult men that causes leakage after frequent urination or the need to urinate, especially at night, prostate cancer: a common cancer that responds best to treatment when detected early.

Musculoskeletal Disease: A musculoskeletal disorder is an injury to the muscles, tendons, ligaments, nerves, joints, cartilage, bones, or blood vessels of the arms, legs, head, neck, or back that occurs or is aggravated by tasks such as lifting, pushing or pulling.

Kidney Disease: Kidney disease occurs when the kidneys are damaged and cannot filter blood the way they should.

Diabetes: Diabetes mellitus is a group of metabolic disorders characterized by chronic hyperglycemia, due to a defect in insulin secretion, a defect in insulin action, or both.

Hypertension: Hypertension is the medical term to refer to high blood pressure. This means that the blood exerts too much force against the walls of the blood vessels. This pressure depends on the work done by the heart and the resistance of the vessels sanguine.

Head of family: The head of the household is the person recognized as such by the other members of the particular household.

Mainactivity: That activity to which most of the time dedicated to work is dedicated.

4.3.Data collection plan

The data was taken from a primary source (motorcycle taxi drivers), through the application of a survey-type questionnaire. Previously, a pilot test of the instruments was carried out to assess their validity and reliability. A survey-type interview was used, through the implementation of a self-made questionnaire. The survey used was developed through the web, designed to legitimize the behavior and trust of the respondents.

5. RESULTS

The field information was obtained through a web-type survey, whose link was shared with a random sample of 30 people dedicated to the motorcycle taxi profession. The results obtained are presented below:

Figure 1, shows the distribution of the age of the people who currently work in the motorcycle taxi trade. As can be seen, 57% of the sample is between 18 and 30 years old.

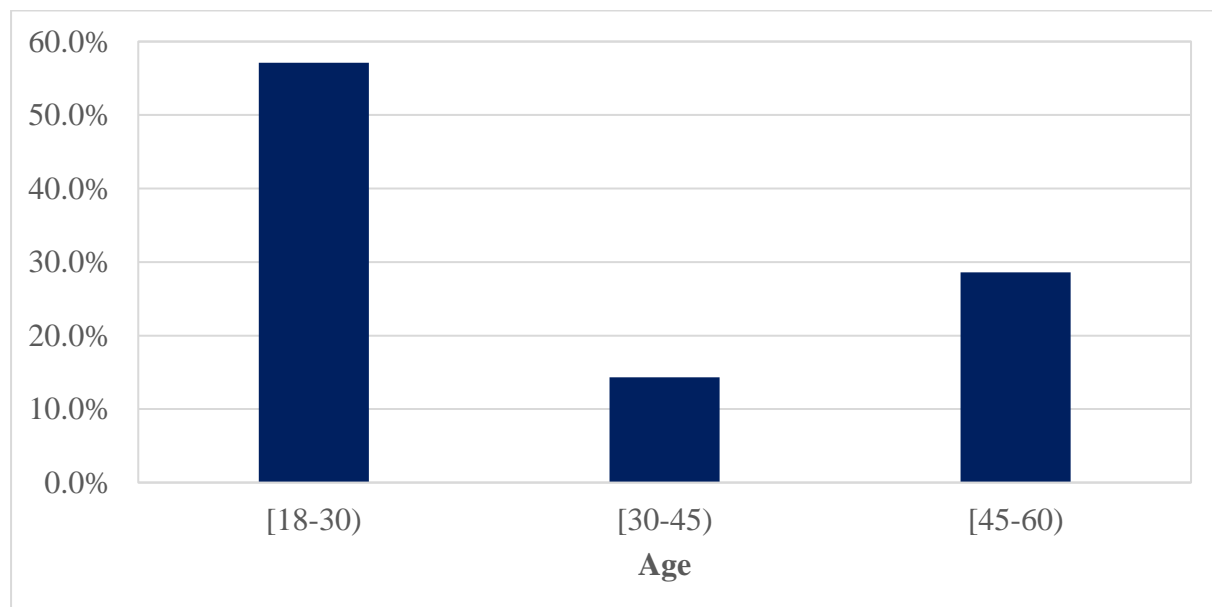


Figure 1. Ages of those surveyed

Source: self-made

The 30 people surveyed in this research correspond entirely to men, because most of the people who work in this trade are of this gender. On the other hand, with regard to marital status, as shown in Figure 2, most are married and the rest in a free union or single.

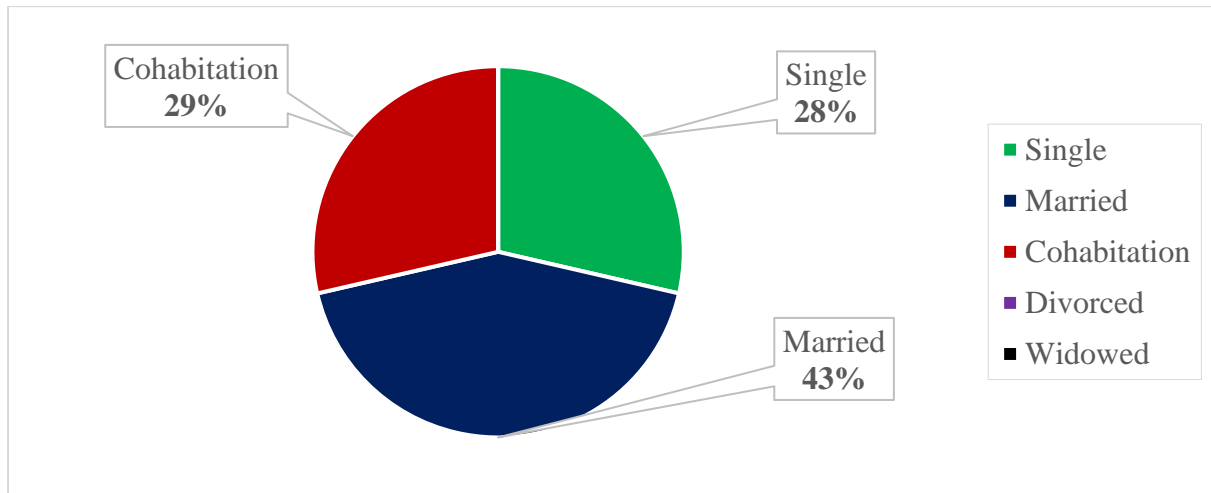


Figure 2. Marital status of respondents

Source: self-made

Regarding access to basic public services, the survey showed that 100% of individuals have these services. On the other hand, it was also possible to determine that the people who work in this activity are all heads or heads of households, where the responsibility for the sustenance of the family lies in the work they carry out as motorcycle taxi drivers and they unanimously affirm that the activity of the motorcycle taxiing is his main source of income.

Figure 3, presents the results that show that about 85% of the respondents state that the motorcycle they drive is their property.

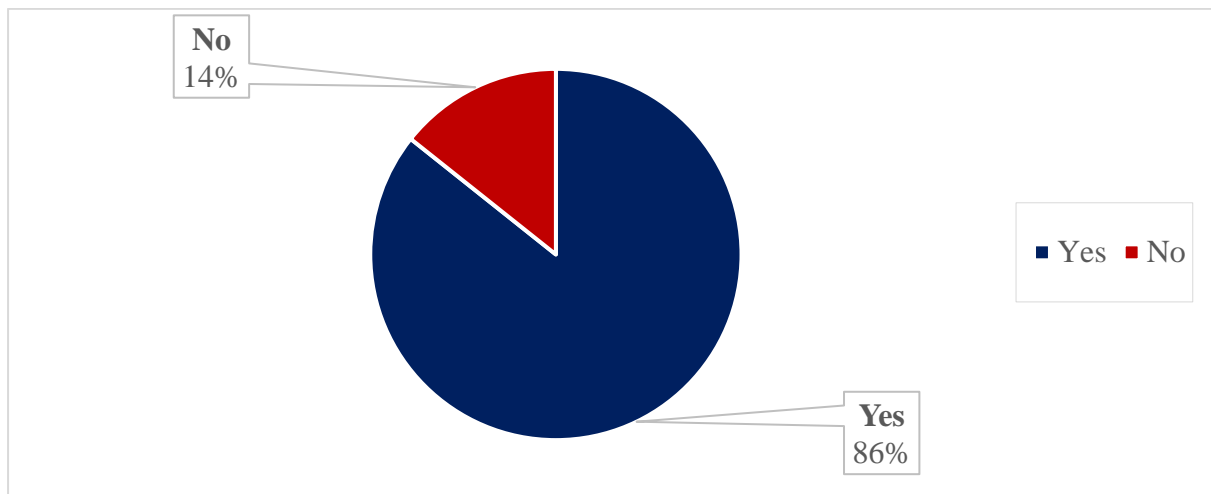


Figure 3. Ownership of the motorcycle

Source: self-made

On the other hand, in Figure 4, the characteristics of the houses in which the respondents live are shown, where it can be evidenced that the highest proportion corresponds to block houses and tile. However, the majority of those surveyed live either in bahareque or blockhouses with a rough floor.

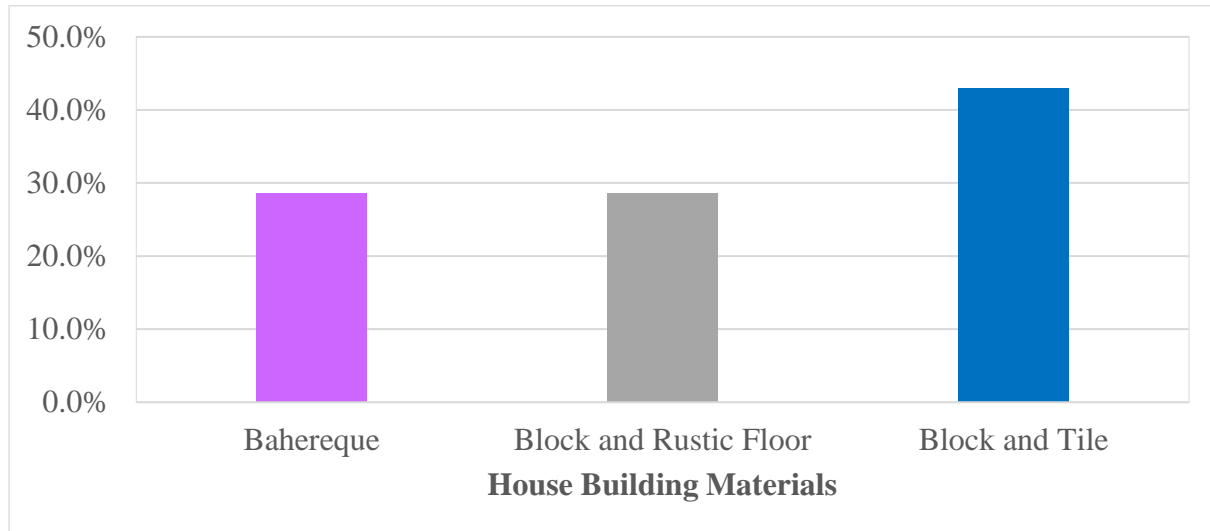


Figure 4. Type of dwelling

Source: self-made

Additionally, the respondents were asked what is the socioeconomic stratum in which their dwellings are categorized. In this regard, according to Figure 5, more than 70% belong to the lowest socio-economic stratum (stratum 1).

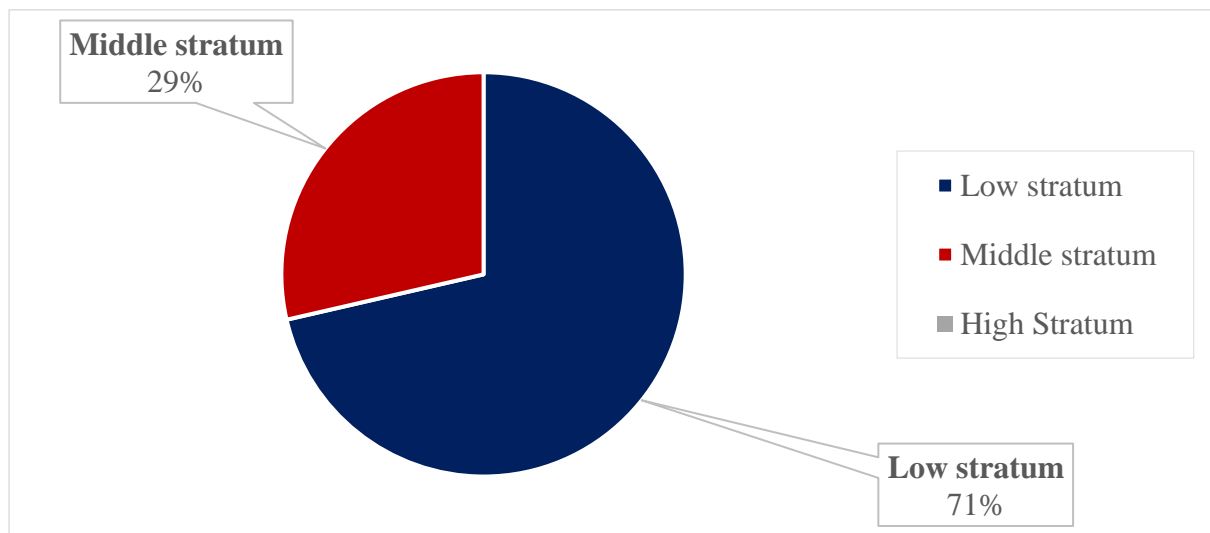


Figure 5. Socioeconomic stratum

Source: self-made

Finally, in Figure 6, the main physical diseases suffered by the surveyed motorcycle taxi drivers are presented, where it can be seen that the two most common diseases occur on the skin, due to the exposure that have these workers to weather conditions.

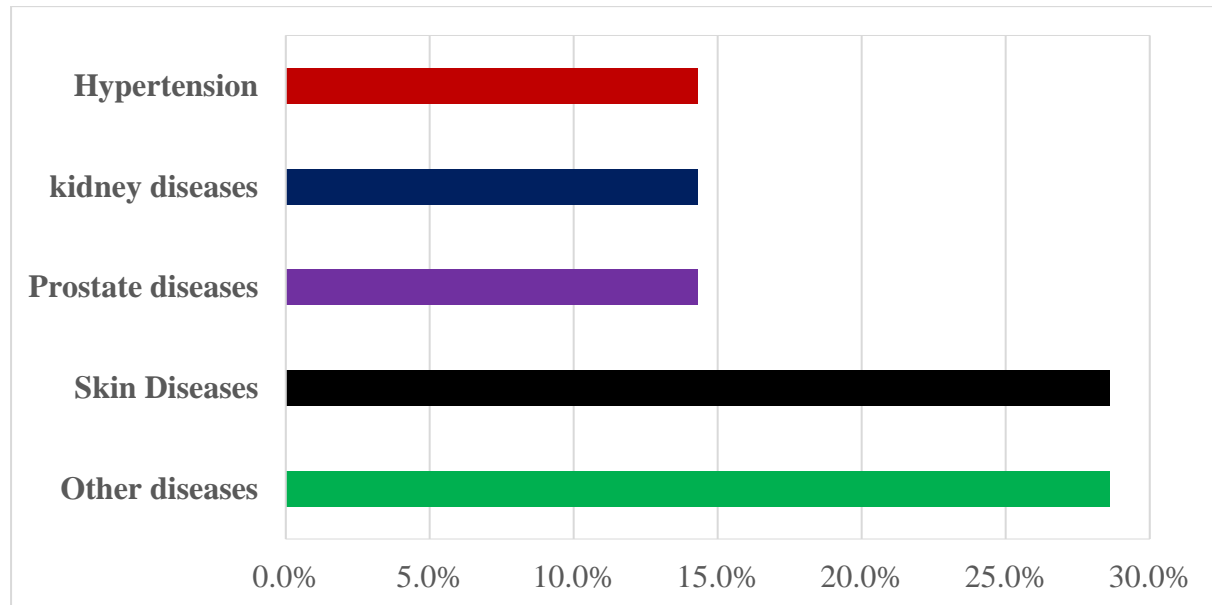


Figure 6. Common diseases

Source: self-made

6. CONCLUSIONS

Most of the people dedicated to motorcycle taxiing in the city of Sincelejo, belong to low socio-economic strata and carry out this work due to lack of employment.

The working conditions are not adequate, since they are exposed during most of the working hours to physical and biological risk factors, such as noise levels that are not very high, but constant; vibrations throughout the body, produced by the motorcycle; exposure to ultraviolet light (sunlight); permanent inhalation of particulate material, smoke and handling of infectious material, so they are exposed to the transmission of diseases due to lack of hygiene and uncleanness in the helmets.

The aforementioned conditions are the cause of diseases among motorcycle taxi drivers in Sincelejo, among the most common are: diabetes, kidney disease, skin disease, obesity, muscle pain, baldness, among others.

REFERENCES

- [1] Paternina. P. Sistematización de Experiencia Problemática del Transporte Público Colectivo Urbano TPCU en su Operador SIBUS del Municipio de Sincelejo: Los Efectos del Mototaxismo sobre la Viabilidad del Servicio. Colombia. 2020. Disponible en: <https://repository.javeriana.edu.co/bitstream/handle/10554/50583/PDF%20TESIS%20APROBADA%20.pdf?sequence=1&isAllowed=y>
- [2] Castillo.B.. El mototaxismo ¿problema informal o un medio de generación de ingresos para resolver en parte el problema del desempleo en Montería? CUC/Volumen 31, Colombia/ISSN 0120 3932. Colombia. 2010. Disponible en: <https://dialnet.unirioja.es/descarga/articulo/5786219.pdf>
- [3] Castillo I., Galarza B, Palomino H. Condiciones de trabajo y salud de mototaxistas Cartagena – Colombia. Revista salud uninorte vol.29 no.3. ISSN 0120-5552. Colombia. 2013.Disponible en: http://www.scielo.org.co/scielo.php?script=sci_arttext&pid=S0120-55522013000300012
- [4] Espinosa.A. Mototaxismo En Sincelejo: Informalidad Oportuna. El libre pensador. Edición 24 E-ISSN: 2389-8100.Colombia.2015. Disponible en: <https://librepensador.uexternado.edu.co/mototaxismo-en-sincelejo-informalidad-oportuna/>
- [5] Márquez.J. Se disparan alergias de piel. El espectador. Colombia.2008. Disponible en: <https://www.elespectador.com/colombia/mas-regiones/se-disparan-alergias-de-piel-article-99327/>
- [6] Castillo I. Condiciones de trabajo y salud de los mototaxistas en la ciudad de Cartagena. 2011”. Colombia. 2011. Disponible en: <https://repositorio.unicartagena.edu.co/bitstream/handle/11227/5379/Condiciones%20de%20trabajo%20y%20salud%20de%20los%20mototaxistas%20en%20la%20ciudad%20de%20Cartagena.pdf?sequence=1&isAllowed=y>
- [7] Sánchez.A. La economía del mototaxismo: el caso de Sincelejo. ISSN 1692-3715. Colombia.2011. Disponible en: <https://www.banrep.gov.co/sites/default/files/publicaciones/archivos/DTSER-140.pdf>
- [8] José Luis Brieva Paternina. Estudio mototaxismo SINCELEJO. Colombia. 2015 Disponible en: <https://www.buenastareas.com/ensayos/Estudio-Mototaxismo-Sincelejo/68958742.html>
- [9] Yanes.L. El trabajo como determinante de la salud. Volumen 11 N° 1 /.Colombia.2003. Disponible en: <http://servicio.bc.uc.edu.ve/multidisciplinarias/saldetrab/vol11n1/11-1-2.pdf>
- [10] Gabaldón.A. Relación salud-trabajo y desarrollo social: visión particular en los trabajadores de la educación. ISSN 0864-3466versión On-line ISSN 1561-3127. Cuba.2006. Disponible en: http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S0864-34662006000100012
- [11] The World Health Organization. ¿Como define la OMS la salud? .N° 2, p. 100. 1948. Disponible en: <https://www.who.int/es/about/frequently-asked-questions>

[12] Hernández-Aguado. Manual Epidemiología y Salud Pública, Relación entre capacidad de funcionamiento del individuo y su ubicación en el continuo salud-enfermedad.2005.