

USE OF PREVENTIVE MEASURES FOR SKIN CANCER BY MOTOTAXISTS

Uso de medidas preventivas para câncer de pele por mototaxistas

Use of preventive measures for skin cancer by mototaxists

Francisco Marciano Américo de Oliveira¹, Karla Bruna Nogueira Torres Barros², Leina Mércia de Oliveira Vasconcelos³, Sandna Larissa Freitas dos Santos⁴, Cinara Vidal Pessoa⁵

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ABSTRACT

Objective: to verify the preventive measures of skin cancer adopted by motorcycle taxi drivers in the city of Mombasa-CE. **Method:** descriptive, exploratory, cross-sectional study, consisting of a quantitative approach, conducted in September and October 2018 at two points of motorcycle taxi drivers. **Results:** of the 29 motorcycle taxi drivers, all were male, with a mean age of 39.48 years, with incomplete elementary school (34.48%), married (58.62%) and 50% had an average income of less than one salary. Minimum. 93.10% answered that they use protection against the sun, being the most used pants and long-sleeved blouses (75%). All respondents said they had never had skin cancer and only (10.34%) said they had received guidance from a health professional. **Conclusion:** the need for health education was evidenced in order to provide adequate knowledge about skin cancer and prevention measures aiming at the management of skin complications by mototaxists.

DESCRIPTORS: Skin neoplasms; Primary prevention; Motorcycles.

RESUMO

Objetivo: verificar as medidas preventivas de câncer de pele adotadas por mototaxistas do município de Mombasa-CE. **Método:** estudo do tipo descritivo, exploratório, transversal, consistindo em uma abordagem quantitativa, realizado em setembro e outubro de 2018 em dois pontos de mototaxistas. **Resultados:** dos 29 mototaxistas, todos eram do sexo masculino, com idade média de 39,48 anos, com ensino fundamental incompleto (34,48%), casados (58,62%) e 50% possuíam renda média de menos de um salário mínimo. 93,10% responderam que utilizam proteção contra o sol, sendo o mais utilizado as calças e blusas de mangas longas (75%). Todos os entrevistados afirmaram nunca ter tido câncer de pele e apenas (10,34%) afirmaram que já receberam orientações de algum profissional de saúde. **Conclusão:** evidenciou-se a necessidade de educação em saúde com a finalidade de proporcionar conhecimento adequado sobre o câncer de pele e as medidas de prevenção visando o manejo de complicações na pele pelos mototaxistas.

- 1 Pharmacist at the Catholic University Center of Quixadá.
- 2 Professor of Pharmacy at the Catholic University Center of Quixadá. Master in Health Education from the State University of Ceará.
- 3 Professor of Pharmacy at the Catholic University Center of Quixadá. Master in Child Health from the State University of Ceará.
- 4 Pharmacist at the Catholic University Center of Quixadá. Specialist in Child and Adolescent Health from the Federal University of Ceará.
- 5 Professor of Pharmacy at the Catholic University Center of Quixadá. Master in Child and Adolescent Health from the State University of Ceará.

DESCRITORES: Neoplasias cutâneas; Prevenção primária; Motocicletas.

RESUMEN

Objetivo: verificar las medidas preventivas del cáncer de piel adoptadas por los conductores de taxis en la ciudad de Mombasa-CE. **Método:** estudio descriptivo, exploratorio, transversal, consistente en un enfoque cuantitativo, realizado en septiembre y octubre de 2018 en dos puntos de los conductores de taxis de motocicletas. **Resultados:** de los 29 taxistas de motocicletas, todos eran hombres, con una edad promedio de 39.48 años, con escuela primaria incompleta (34.48%), casados (58.62%) y el 50% tenía un ingreso promedio de menos de un salario mínimo. El 93,10% respondió que utilizaban protección contra el sol, siendo los pantalones más usados y las blusas de manga larga (75%). Todos los encuestados dijeron que nunca habían tenido cáncer de piel y solo (10.34%) dijeron que habían recibido orientación de un profesional de la salud. **Conclusión:** la necesidad de educación sobre la salud se puso de manifiesto para proporcionar un conocimiento adecuado sobre el cáncer de piel y medidas de prevención dirigidas al manejo de las complicaciones cutáneas por parte de los mototaxistas.

Palabras clave: Neoplasias Cutáneas; Prevención Primaria; Motocicletas.

INTRODUCTION

The word cancer is derived from the Greek *karkínos*, which means crab, the pronunciation was first made by Hippocrates, the father of medicine. The fact that it was detected in Egyptian mummies proves that cancer is not a new disease, and that it had already compromised man more than 3,000 years before Christ. Nowadays cancer is the general name given to a set of more than 100 diseases, having in common the disorderly growth of cells, which tend to invade neighboring tissues and organs.¹

In the last three decades the incidence of skin cancer has increased worldwide, being one of the most prevalent neoplasms in Brazil. Numerous causes are pointed out, such as: excessive and often unprotected sun exposure, genetic factors, family history of skin cancer, ultraviolet radiation, changes in the lifestyle and degradation of the ozone layer.²

Cancer is considered as one of the main health problems in developed and rising countries, being responsible for causing approximately six million deaths per year, statistically, 12% of all reasons for death on the planet.³⁻⁴ Despite the highest prevalence of occurrences of neoplastic conditions occurring in developed countries, ten million new cases are registered every year and, of this alarming number, five and a half million have a confirmed diagnosis in countries that are still in progress.⁵

The different types of skin cancer fuse from the cell layers. These are divided into Non-Melanoma Skin Cancer (NMSC) and Melanoma Skin Cancer (MSC). The non-melanoma type is subdivided into basal cell carcinoma representing the most common type of skin cancer, corresponding to approximately 78% of all skin cancers, where the tumors originate from the cells of the basal layer of the epidermis and rarely metastasize, unlike squamous cell carcinomas, second subdivision, which are equivalent to approximately 20% of all skin cancers that originate from squamous cells

of the epidermis and have a variable tendency to metastasis. The melanoma skin cancer, also known as malignant melanoma, is the most dangerous of all, appears as a dark speck that deforms over time. It can be fatal if not diagnosed early, as it can develop quickly and reach other organs.⁶

The World Health Organization (WHO) foresees for the year of 2030 the probability of more than twenty-six million and a half of new incidents of cancer, seventeen million deaths per year, with cancer. The effect of this increase will be on low and middle income countries. Of all types of cancer, cutaneous cancer is generally the most frequent type of cancer that affects men. Its occurrence has been recorded more frequently in a more expressive way around the world.⁷⁻⁸

Workers who are exposed to solar radiation (UV-A and UV-B) are at risk for skin cancer. Among the professions that are most at risk are fishermen, farmers, traffic wardens, street sweepers, postmen and mototaxi drivers.⁹

Mototaxi drivers, however, face many disadvantages in their workday, such as: traffic, rain, physical and emotional distress, risk of robberies and, mainly, sun exposure. In this context, photoeducation measures, which consist of educational actions with the objective of raising the community's awareness of the risks of sun exposure and providing guidance on photoprotection procedures, must be adopted to prevent skin cancer.¹⁰

In view of this, there was an interest in obtaining information about the knowledge of these workers regarding cancer prevention, and such information will serve as subsidies for improving and expanding knowledge related to the disease, therefore decreasing its incidence and consecutively improving the quality of life of these professionals. In view of the above, this study aims to verify the preventive skin cancer measures adopted by mototaxi drivers in the municipality of Mombaça-CE, Brazil.

METHODS

This research is a descriptive, exploratory, cross-sectional study, with a quantitative approach, carried out at two work points of mototaxi drivers located in the center of Mombaça-CE, Brazil. The population consisted of motorcycle taxi drivers associated with the motorcycle taxi union in that municipality. To participate in this study, the following inclusion requirements were obeyed: motorcycle taxi drivers of both sexes, aged 18 or over, who worked during the day and were able to argue the information contained in the form. Those who did not agree to participate in the research were excluded.

Motorcycle taxi drivers were informed about the study and invited to participate in the research. Those who accepted signed the Informed Consent Form (ICF). Data collection was carried out in the months of September and October 2018. The data of interest were obtained through an interview, which used a form as an instrument to trace the socioeconomic profile and ascertain the information related to work and preventive measures used.

Data analysis was performed using the tabulation of information obtained in the Microsoft Office Excel® program, later analyzed in the Epi Info® version 7.2 statistical program.

In this statistical analysis, the average of the continuous variables was calculated and the absolute and relative frequency of the categorical variables was calculated. Then, the data were expressed in tables. The research was submitted to the Research Ethics Committee of the Catholic University Center of Quixadá, through *Plataforma Brasil* and approved under Protocol No. 2,853,046 on August 29, 2018, in compliance with the recommendations of Resolution 466/12 of the National Council of Health that regulates the guidelines and norms of research in human beings.¹¹

RESULTS AND DISCUSSION

The results presented and discussed here are based on an interview with 29 motorcycle taxi drivers, all of whom were male, with an average age of 39.48 years of age and standard deviation of 10.23. In terms of education, individuals with incomplete elementary education prevailed 10 (34.48%), followed by complete elementary education 8 (27.59%).

This is a profession practiced almost exclusively by men and many young people and people with older age groups find in this activity the only lucrative job option, as they are often victims of unemployment.^{12,13} The low level of education presented in the study reflects a certain difficulty for the interviewees to enter or return to the formal labor market, and end up working under worrying working hours and income.^{10,13,14}

More than half of the participants declared themselves to be single 17 (58.62%), followed by 12 (41.38%) married. Considering the variable income, half of the interviewees had an average income of less than one minimum wage 14 (50%), and those who received one minimum wage corresponded to 11 36.21% of the individuals (Table 1).

Table 1 - Description of the socioeconomic variables of the study participants. Mombaça, CE, Brazil, 2018 (N=29)

Variables	General	
	N	%
Genre		
Male	29	100
Education		
Never attended school	2	6.90
Incomplete elementary school	10	34.48
Complete elementary school	8	27.59
Incomplete high school	2	6.90
Complete high school	6	20.69
Incomplete higher education	1	3.45
Marital status		
With Companion	12	41.38
No Companion	17	58.62
Monthly income (minimum wage)		
Less than one minimum wage	14	50.00
One minimum wage	11	36.21
Above 2 minimum wages	4	13.79

In a study carried out on skin cancer preventive measures used by motorcycle taxi drivers from a federation unit in northeastern Brazil, there was a predominance of males and an average of 34.41 years of age.¹⁵

With the age group of 26 to 35, with regard to education, individuals with complete secondary education prevailed. Most were married, and in relation to income, most had an average income of two minimum wages.

In the municipality of Jequié, in the southwestern region of Bahia, in a survey on the knowledge of motorcycle taxi drivers regarding occupational risks, it was found that about half of the study participants were between 31 and 40 years old, all male. As for education, incomplete elementary education prevailed, corroborating with the present study.¹⁶

From Table 2, it can be seen that almost all participants (93.10%) use some method of protection, with the majority wearing long-sleeved shirts and pants 21 (75%), followed by the use of a helmet 20 (68.97%) and sunscreen 12 (41.38%).

Table 2 - Distribution of mototaxi drivers according to protection methods. Mombaça, CE, Brazil, 2018 (N=75)

Methods of protection	General	
	N	%
Long-sleeved shirts and pants	21	75.00
Helmet	20	68.97
Sunscreen	12	41.38
Cap	09	31.00
Sunglasses	06	20.69
Closed shoes/Boots	05	17.24
Gloves	02	6.90

It is clear that the vast majority of respondents use at least one method of protection against the sun. Lima¹⁷ shows data similar to the present study, where everyone uses sleeves, pants and helmets as the main source of protection and (66.07%) sunscreen. Studies reveal that professional motorcyclists are aware of the importance of using the means of protection, and even when they do not use it, they seek other means of protection during the workday.¹⁸

Sun protection habits can change according to the needs of each individual and also how one will feel more comfortable. As evidenced, most of the interviewees claim to have a preference for the use of long sleeves and pants, not taking into account that the ultraviolet rays are able to pass through the fabrics of their clothes, breaking this barrier that they believe gives them protection, thus having free contact with the skin, which may cause, over time, what is popularly known for cumulative levels of exposure to the sun, enabling the occurrence of skin cancer, even in individuals who employ these “preventive” practices.¹⁹

The use of sunscreen has been characterized by several scholars as an effective form of protection in reducing the formation of precancerous and cancerous lesions.²⁰ Proper use of sunscreen has been largely effective in reducing cases of skin neoplasms, being the protection method most recommended in the prevention of all skin cancerous lesions, demonstrating

greater effectiveness when associated with other forms of protection, therefore, guidance on the correct use of this product before starting the working day and during it when necessary are essential.²¹

In the analysis of Table 3, it can be seen that 14 (48.28%) of the interviewees consider themselves brown, followed by white with 13 (44.83%). It is noteworthy that the majority work both shifts 23 (79.31%) and 10 (34.48%) work eight hours a day exposed to the sun.

Table 3 - Distribution of mototaxi drivers according to skin color, shift in which they work and hours of sun exposure. Mombaça, CE, Brazil, 2018 (N=29)

Variables	General	
	N	%
Skin color		
White	13	44.83
Brown	14	48.28
Black	02	6.90
Workshift		
Morning	06	20.69
Morning/Afternoon	23	79.31
Hours of sun exposure		
04	05	17.24
06	08	27.59
08	10	34.48
10	06	20.69

In a survey regarding the knowledge of mototaxi drivers on the problem of skin cancer in the municipality of Santarém-PA, Brazil, it was found that (74%) of the interviewees considered themselves to be brown, 16% said they were white, 8% black and 2% yellow.²² In another study (48.4%) of the interviewees declared themselves to be white, (42.7%) brown and (8.9%) black.¹⁷ Regarding the period of work, most confirmed working in the morning/afternoon, demonstrating data similar to those found in this study.

It is reinforced and evidenced that the propensity to develop skin cancer during life is related not only to individual characteristics but also to environmental characteristics, including family history, skin type and phenotype, and level of cumulative ultraviolet (UV) radiation exposure throughout life, which makes people living in tropical countries, such as Brazil and Australia, more likely to acquire this type of neoplasm, since they are more exposed to solar radiation in their daily lives.²³

Mototaxi drivers are the main individuals in the risk groups most susceptible to the development of skin cancer, due to the long period of sun exposure to which they are subjected during their work period. Authors express skin melanoma as the most prevalent risk among which mototaxi workers are exposed, second only to the occurrence of a traffic accident.²⁴

As for knowledge regarding skin cancer, most answered that they were aware of the disease (86.21%). According to

the sources of information presented in Table 4, it appears that just over half of the respondents answered that the main means of information is radio and television 16 (55.17%), followed by friends 11 (37.93%) and 06 (20.69%) answered that they obtained knowledge through family members or newspapers and magazines.

Table 4 - Distribution of mototaxi drivers according to information sources on skin cancer. Mombaça, CE, Brazil, 2018 (N=40)

Means of information	General	
	N	%
Radio/television	16	55.17
Friends	11	37.93
Family members	06	20.69
Newspaper/magazines	06	20.69
Internet	01	3.45

Alert campaigns for the importance of prevention and early diagnosis of cancer in general, especially skin cancer, have been carried out by the most diverse social media (radio, TV, social networks), which have played an important role in raising awareness among the population, thereby promoting broad access to information for all audiences.²⁵

Television is a strong means of communication to propagate information and directly influences the habits of the individual, through the broadcast of programs in the area of health and advertisements, allowing the population to acquire knowledge about the most varied subjects, especially skin cancer; however, the information shown in the media is not always effective in clarifying all doubts and stimulating the prevention of skin cancer.²²

It can be noted that among the interviewees, they all said they did not have skin cancer, however, the majority did not seek clinical consultation with the dermatologist (89.66%). A minority that seeks specialists, often already has some type of skin change.¹⁵

It is important to highlight that (82.76%) of motorcycle taxi drivers never observed spots or lesions on the skin and that the vast majority (89.66%) do not know how to recognize the signs and symptoms of skin cancer and never received guidance from any health professional. Self-examination is an initial condition, performed by the individual who, upon detecting any alteration, should seek a medical service for clarification, contributing to the early detection of skin cancer.²⁶

It is important to note that all participants stated that they do not have prevention campaigns against skin cancer in the municipality. Therefore, the importance of a qualified professional in the practice of health education focused on this problem is emphasized. It is noteworthy that the basic knowledge about the disease helps in its possible prevention. In this case, the support of health professionals is extremely important so that they can provide relevant health guidelines to the needs of each individual according to their basic knowledge.²⁷

Health education represents a promising strategy to face the multiple health problems that the population faces, relating to technical and popular knowledge, mobilizing community, public and private resources, always seeking to build viable proposals for health problems.²⁸

CONCLUSION

The need for prophylactic actions through health education is notorious, aiming at involving health professionals in giving lectures, distributing educational material, photoprotectors, campaigns in the media; and these photoeducation activities cannot be punctual, it is important that they continue throughout the year, in order to provide more adequate knowledge about skin cancer and preventive measures to these risk groups in order to reduce the incidence of the disease, contributing to their quality of life. Studies with mototaxi drivers are still scarce, however, it is worth emphasizing the importance of conducting more comprehensive research on this topic.

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Corresponding author

Sandna Larissa Freitas dos Santos

Address: Rua Major Pedro Sampaio, 1166, Rodolfo Teófilo
Fortaleza/CE, Brazil

Zip code: 60.420-185

Email address: sandy.lary@hotmail.com

Telephone number: +55 (85) 99766-4341

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