Workers Health on the Roads- Extension Data in Goiás

A Saúde dos Trabalhadores nas Estradas- Dados da Extensão em Goiás

La salud de los trabajadores de la carretera- Datos de extensión en Goiás

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RESUMO

Objetivo: discorrer sobre a execução do projeto, bem como apresentar parte dos dados obtidos por meio da ação comunitária desenvolvida no Estado de Goiás em 2021, denominada: Projeto Saúde na Estrada. **Método:** trata-se de um estudo descritivo, tipo relato de experiência originado em um projeto de extensão, cujos dados coletados foram de aproximadamente 2277 participantes. **Resultados:** Os resultados deste estudo trouxeram a necessidade profunda de mudanças organizacionais, de logística e até na gestão dos serviços de saúde. Apresentaram um número significativo de pessoas que dirigem na estrada, em condições pouco saudáveis. **Conclusão:** É necessário que sejam fomentados projetos e pesquisas da parte do poder público para esses trabalhadores, que possuem pouco ou nenhum tempo para procurar uma unidade básica de saúde ou um hospital público por onde passam. As políticas de saúde hoje desenvolvidas no âmbito da promoção da saúde e da prevenção de doenças, ainda estão muito limitadas a um local, de comodidade para os que nele trabalham. A mentalidade do trabalho dentro da instituição faz parte de um processo cultural difícil de ser quebrado.

Descritores: Saúde do Trabalhador; Saúde Comunitária, Vigilância em Saúde do Trabalhador.

ABSTRACT

Objective: describe the execution of the project, as well as present part of the data obtained through the community action developed in the State of Goiás in 2021, called: Projeto Saúde na Estrada. **Method:** this is a descriptive study, experience report type originated in an extension project, whose collected data were from approximately 2277 participants. **Results:** The results of this study brought about a deep need for organizational, logistical and even management changes in health services. They showed a significant number of people driving on the road, in unhealthy conditions. **Conclusion:** It is necessary to promote projects and research by the government for these workers, who have little or no time to look for a basic health unit or a public hospital where they visit. Health policies developed today within the scope of health promotion and disease prevention are still very limited to a place of convenience for those who work there. The work mentality within the institution is part of a cultural process that is difficult to break.

Descriptors: Occupational Health; Community Health; Surveillance of the Workers Health.

RESUMEN

Objetivo: es hablar sobre la ejecución del proyecto, así como presentar parte de los datos obtenidos a través de la acción comunitaria desarrollada en el Estado de Goiás en 2021, denominada: Projeto Saúde na Estrada. **Método:** se trata de un estudio descriptivo, tipo relato de experiencia originado en un proyecto de extensión, cuyos datos recolectados fueron de aproximadamente 2277 participantes. **Resultados:** Los resultados de este estudio provocaron una profunda necesidad de cambios organizativos, logísticos e incluso de gestión en los servicios de salud. Mostraron un número significativo de personas conduciendo por la carretera, en condiciones insalubres. **Conclusión:** Es necesario impulsar proyectos e investigaciones del gobierno para estos trabajadores, que tienen poco o ningún tiempo para buscar una unidad básica de salud o un hospital público donde visitan. Las políticas de salud desarrolladas hoy en el ámbito de la promoción de la salud y la prevención de enfermedades aún están muy limitadas a un lugar de conveniencia para quienes allí laboran. La mentalidad laboral dentro de la institución es parte de un proceso cultural difícil de romper.

Descriptores: Salud Laboral; Salud Pública; Vigilancia de la Salud del Trabajador.

ORIGINAL

Introduction

Since 2008, Ipiranga Produtos de Petróleo, a private oil derivatives distribution company in Brazil in partnership with Estrada Serviços, a company specialized in the transportation sector, the Health on the Road Program, whose objective is to provide quality health care for truck drivers providing them with precise guidance and guidance on their health.

Through a structure set up at ipiranga rodo rede stations, located along the main highways and transport corridors of the country, the Health on the Road Program aims to bring health, information and prevention to those who spend much of their life behind a steering wheel and do not have time to take care of themselves: "the truckdriver".

Saúde na Estrada has a structure totally designed for the care of the driver on the road, with comfortable and appropriate facilities for performing health procedures, which include several tests such as: blood pressure measurement, glucose test, Vision Tests, Body Mass Indexes, vaccines and others. Participants also receive information about safe sex, disease prevention and health promotion. Since then, year after year, the Program has been gaining increasing strength and being present on the main roads from north to south of the country.

With itinerant structure and installed in Ipiranga stations on highways throughout the country, since its first route, Saúde na Estrada has performed more than 600,000 services, of which 200,000 were truckers. There was passage in 190 different municipalities, on routes that have traveled more than 450,000 km from Brazil. In total, there are more than 1,500 events, involving more than 50,000 volunteer health professionals. The Project started in 2008, and this year it turned.[14]

After describing the importance of this project, it is appropriate to discuss law No. 13,103 of March 2, 2015, which provides for the exercise of the profession of driver, which is free to citizens provided that it meets the conditions and qualifications provided for by law. The occupational group to which the Law refers are drivers whose direction requires professional training and who exercise their occupation in the activities of road transport of passengers or cargo.[1]

According to Silva et al, almost two million truckers are responsible for the most important means of cargo transporting in the Brazilian economy, the bus station, and have strenuous working hours.[2]

Despite their economic importance, truckers are often exposed to poor working conditions, including long working hours, irregular working hours, lack of rest breaks, poor road structure, thefts and traffic accidents. The effects of the aspects mentioned may be harmful to the health of these workers, particularly obesity, hypertension, diabetes mellitus, sleep disorders, stress and fatigue, which are more frequent in this occupational group in relation to the general population.[3]

According to Batista et al, many of the health research conducted with this professional group is limited to the biomedical perspective, examining the risk factors for diseases, and studies on the self-care behavior of truck drivers are inadequate and even little publicized.[4]

In addition to this problem, this study aimed to discuss the implementation of the project, as well as to present part of the data obtained

through the community action developed in the State of Goiás in 2021, called: Projeto Saúde na Estrada.

Method

This is a descriptive study, a type of experience report originated from an "action research", while the action was conceived in which researchers and participants representing the situation are involved in a cooperative or participatory manner.

The figures show how great the demand for the Program throughout Brazil and in many cases is the opportunity that the road professional has to take care of his health. The work is carried out with several partnerships in each municipality that is home to the event, such as: the Health Departments, the Health Courses and Highway Police of each municipality where the Program passes.

The physical structure comprises the tents of 3.0 by 4.5 meters, tables and chairs, side coverings, carpets, partitions and materials of the health area. It is prepared for various factors, such as heat or rain.

The tents are divided by examinations, with the aid of partitions and carpets. In all tents there are trash cans and towels for cleaning during the day, remembering that this year due to the pandemic by the new coronavirus the structure and materials are used so that both students, professionals and drivers had all possible security. Also, the service has a wide computer network for data collection and recording. At the entrance, a list shows drivers the service services that are offered on the day.

In 2021 the nursing course of the Planalto University Center of the Federal District - UNIPLAN formalized the partnership with Ipiranga Indústria de Petróleo for the realization of the Health on road program, held between June 23 and 28 of the current year, in the cities of Formosa, Luziânia, Guapó and Aparecida de Goiânia, and in some of these were more than one day of care.

At the time of arrival of health teams, a meeting is held where details of the Program and the service profile are explained. After that, the teams are distributed among the procedures to be performed. Participants are distributed vests and badges of the Program, in addition to the breakfast, afternoon and lunch voucher (on behest of the organization) in the restaurant of the post, as well as will be guaranteed the lodging of all students.

The Federal and State Highway Police support the Program, in addition to guidelines to drivers in the structure, also assist with an educational blitz on the highway, directing drivers to participate in the Program.

Following, the Ipiranga Industry team approaches drivers in the station yard, explaining the Program and inviting them to participate. On average, 300 drivers are served per day. Before the checks, a driver's registration is performed and he receives a card for the notes of his health data.

At the end of the action in the State of Goiás, the spreadsheets were obtained with the results recorded, without identification of the people attended and the organization and compilation of the data was made.

Results and Discussion

The results of this study show the majority of male participants, between 31 and 45 years old, followed by men between 46 and 59 years of age. Among the data collected regarding the health of truck drivers follows analysis and discussion as follows:

Figure 1 - Total number of men's and women's blood pressure and blood glucose. Goias, 2021.

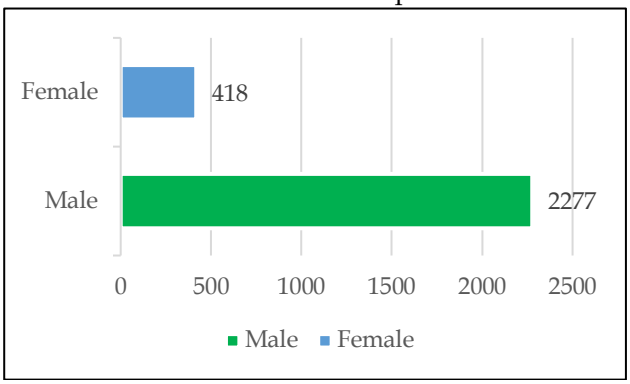
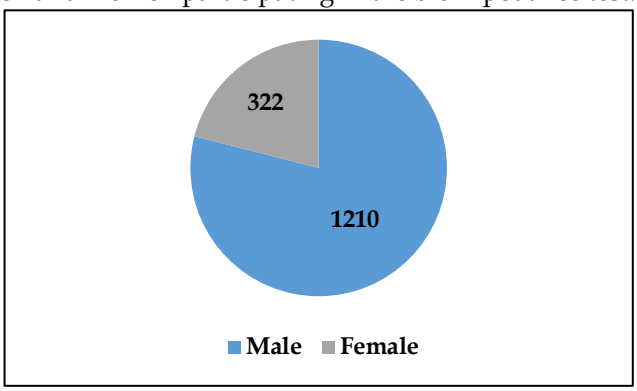
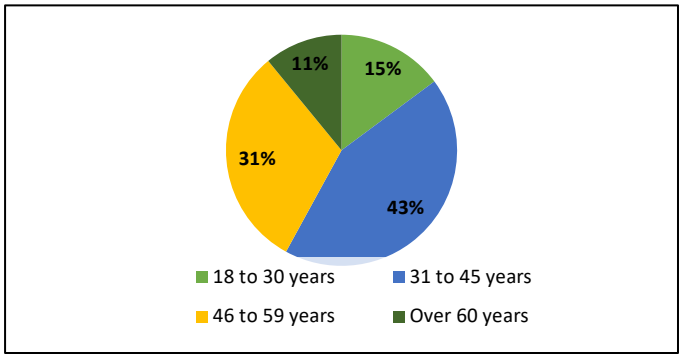


Figure 2 - Men and women participating in the bioimpedance test. Goias, 2021.



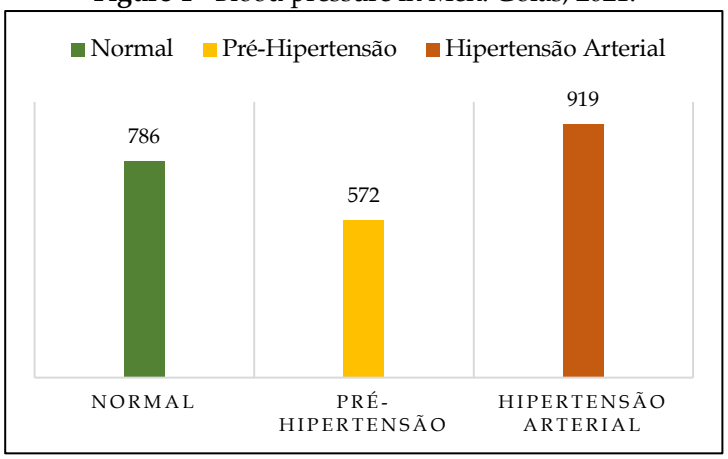
Truck drivers are predominantly men who make long, uninterrupted journeys to meet the delivery times set by the companies for which they work. Therefore, it is common for them to work long shifts to achieve their goals, and this can put their health in danger. The truckers' work and health aspects found that this occupation can trigger the emergence of several health problems associated with constant exposure to physical and ergonomic risk factors, besides contributing to the development of harmful habits to stay awake.[5]

Figure 3 - Age group of male participants who underwent blood pressure and blood glucose. Goias, 2021.



Regarding men's blood pressure, the following data were obtained:

Figure 4 - Blood pressure in Men. Goias, 2021.



Of the total of 919 diagnosed with hypertension, 355 examined are between 46 and 59 years old, which corresponds to 38.63% of the total. Then, the age group from 31 to 45 years presented 327 people with hypertension, estimated at 35.58%. The age group between 18 and 30 years had 94 hypertensive men, which corresponds to 10.23%, and the elderly had 15.23% of the total hypertensive patients (143 of the total number of men).

In relation to the 572 examined with alteration in BP, 272 examined correspond to the age group from 31 to 45 years (47.55%), followed by 156 interviewees aged 46 to 59 years (27.27%). Of the younger ones, from 18 to 30 years old, 104 had BP alterations (18.36%), and 40 of the elderly presented (6.99%).

Hypertension is defined as systolic blood pressure greater than or equal to 140 mmHg and diastolic blood pressure greater than or equal to 90 mmHg in people who do not use antihypertensive drugs. In addition to blood pressure values, the overall cardiovascular risk, estimated from the presence of risk factors, presence of target organ lesions and associated comorbidities, should be taken into account in the diagnosis of SAH.[6]

In younger age groups, blood pressure is higher in men, while the increase in pressure per decade is higher in women. For example, in the sixth decade of life in women, blood pressure is usually higher and the prevalence of AH is higher. In both sexes, the incidence of AH increases with age, reaching 61.5% and 68.0% in the group aged 65 years or more, for men and women, respectively.[7]

Systemic arterial hypertension is the most common cardiovascular disease. It is also the main risk factor for the most common complications, such as stroke and acute myocardial infarction and chronic end-stage kidney disease. Because it is asymptomatic in most of its development, its diagnosis and treatment are often neglected, in addition to the patient's poor treatment of the prescribed treatment, the main factors that lead to inefficient control of SAH at the levels considered. in the course of developments around the world, despite the various existing protocols and recommendations and improved access to medicinal products.[6]

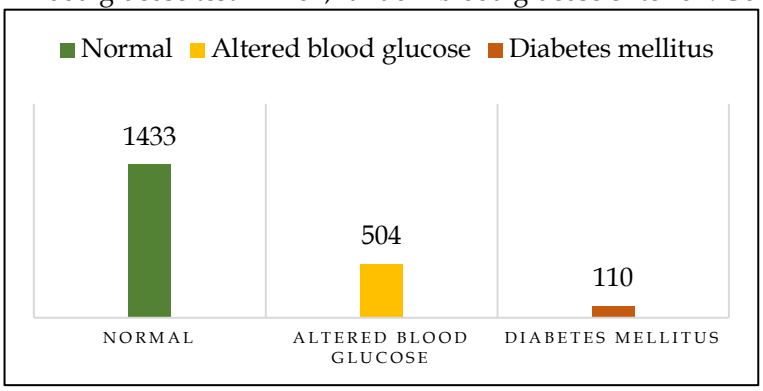
In addition, according to Barroso et al, SAH has a significant impact on the medical and socioeconomic costs of fatal and non-fatal complications in target organs, such as: heart: coronary artery disease (CHD), heart failure (HF), atrial

fibrillation (AF), and sudden death; Brain: ischemic (VAS) or hemorrhagic stroke (stroke), dementia; Kidneys: CKD that may evolve to need dialysis therapy; and arterial system: peripheral arterial disease (PAD).[7]

According to Moraes et al, the treatment is due to weight control, since obesity is associated with increased risk of AH. There are several dietary suggestions to prevent AH that also help control patients with hypertension and contribute to overall health. Excessive sodium intake is one of the most important modifiable risk factors for the prevention and control of AH and cardiovascular diseases, and sodium restriction has shown antihypertensive effect in many studies. Sedentary lifestyle is also a risk factor for the prevalence of Cases of AH.[8]

In the blood glucose tests performed in the total number of patients examined, the following data were recorded:

Figure 5 - Blood glucose test in men, random blood glucose criterion. Goias, 2021.



Of the total of 504 with altered blood glucose, 192 examined are between 46 and 59 years old, which corresponds to 38.1% of the total. With approximate values, the age group from 31 to 45 years presented 188 people with hypertension, estimated at 37.3%. The age group above 60 years had 84 diagnosed (16.67%) and young people aged 18 to 30 years had 7.94%, which corresponds to a total of 40 people.

The majority of those diagnosed with Diabetes mellitus were between 46 and 59 years old, with 60 diagnosed (54.55%), followed by men over 60 years of age, with 28 diagnosed (25.45%), 20 men aged between 31 and 45 years were diagnosed with DM (18.18%) and only two men (1.82%) from 18 to 30 years had results above normal levels.

Diabetes Mellitus type 2

According to the Ministry of Health, the expression "diabetes mellitus" (DM) denotes a heterogeneous-based metabolic disorder indicated by hyperglycemia and changes in the metabolism of carbohydrates, proteins and fats arising from defects in insulin secretion and/or action.[9]

Among chronic non-communicable diseases (NCDs), type 2 diabetes mellitus is considered an epidemic and accounts for about 90% of all cases of diabetes. It is estimated that in 2010 there were 285 million people over the age of 20 living with diabetes worldwide and that the number could reach 439 million by 2030. It is also believed that about 50% of diabetics do not know they have the disease.[10]

According to Moraes et al, Brazil is the fourth largest country with the most cases of the disease in adults in the world (14.3 million people). In 2015 alone, there were 130,700 deaths from DM2. A 2013 household survey in the country on the incidence of DM found that the prevalence of self-reported disease was 6.2%, with a higher proportion among women and residents in urban areas.[8]

According to Barroso et al, Diabetes mellitus can be diagnosed by the following criteria: fasting plasma glycemia of > 126 mg/dL; glycated hemoglobin > 6.5%, measured by high performance liquid chromatography (HPLC); or, blood glucose > 200mg/dL, after 2 h of oral glucose overload in oral tolerance test or random glycemia.[7]

Type 2 DM tends to have a gradual onset and milder symptoms. It usually manifests in adults with a history of obesity and a family history of type 2 DM. The term "type 2" is used to denote a relative insulin deficiency, i.e., a state of resistance to the effects of Insulin associated with a defect in its secretion that is less intense than in type 1 diabetes. Once diagnosed, type 2 can develop for many years before insulin is needed for control. Its use, in these cases, does not aim to avoid ketoacidosis, but to achieve control of hyperglycemic condition.[9]

The Ministry of Health also predicts that the characteristic signs and symptoms of diabetes are the "four Ps": polyuria, polydipsia, polyphagia and unexplained weight loss. Although they may be present in type 2 DM, these symptoms are more acute in type 1 and may lead to ketosis, dehydration, and metabolic acidosis, especially with acute stress. More vague symptoms, such as itching, blurred vision, and fatigue, may also occur. The onset of type 2 DM is gradual and the person usually shows no symptoms. It is not uncommon to suspect a late complication such as proteinuria, retinopathy, peripheral neuropathy, arteriosclerotic disease, or recurrent infections.[9]

Glycated hemoglobin A (hemoglobin A1c) stands out as the standard test for glycemic control evaluation. There is ample evidence that good blood glucose control and other risk factors, such as obesity, sedentary lifestyle and hypercaloric diet, prevent acute and chronic complications of the disease.[8]

The treatment of type 2 diabetes mellitus (DM) consists in the adoption of healthy lifestyle habits, such as balanced diet, regular physical activity, moderate alcohol consumption and smoking cessation with or without drug treatment. A healthy lifestyle is the cornerstone of diabetes treatment and is key to controlling blood sugar levels as well as controlling other risk factors for cardiovascular disease.[6]

In the BMI test performed in a total of 1532 examined, the following data were recorded: 387 have BMI less than 25kg/m^2, that is, within normal limits; 597 had BMI between 25 and 29.9kg/m^2, which characterizes overweight; 548 had BMI equal to or greater than 30kg/m^2, which means obesity.

In the BMI test performed in a total of 1210 men, 277 are within normal weight, 472 are overweight and 461 were obese. Of the total number of men, 208 presented a degree of obesity within the normal range, which is between 90 and 109; 999 presented a higher degree of obesity than the bioimpedance scale parameter – grade of Obesity is the relationship between current weight and ideal weight, which is a value greater than 110.[11] Of the total men, 1093 are overweight and 117 are at normal weight.

Obesity

Obesity has a multifactorial origin and is quite common in Brazil, and eating habits may reflect psychological conflicts that directly affect care practices, especially diet and physical activity.[12]

According to the Ministry of Health, obesity in most cases is caused by an energy imbalance when a person uses more energy than they spend. This positive energy imbalance leads to weight gain. There are several methods to assess whether a person is overweight. In practice and for evaluation at the population level, the use of body mass index (BMI) is recommended because it is easy to measure and because it is a noninvasive and low-cost measure. In addition to weight classification, BMI is also an indicator of health risks and is related to various metabolic complications.[13]

Unhealthy eating and insufficient physical activity are the main risk factors for obesity. Indicators that measure the frequency of physical activity both at leisure and at work, as well as sedentary lifestyle are important in assessing people's lifestyle.[14]

Identification and admission of overweight/obese people Active search, spontaneous need, programmed need: Normal: BMI <25 kg/m²: Food and nutritional surveillance; Actions to promote adequate and healthy eating and physical activity. Overweight: BMI from 25 to 29.9 kg/m²: Food and nutritional surveillance; Actions to promote adequate and healthy eating and physical activity; Action plan to return to normal BMI. Obesity: BMI from 30 to 40 kg/m² with and without comorbidities: Food and nutritional surveillance; Guidance on adequate and healthy eating and physical activity; Prescription: Dietary; Behavioral therapy; Pharmacotherapy.[12]

For the treatment of cases of obesity (BMI from 30 kg/m² to 40 kg/m²), with or without comorbidities, a wider range of therapies is required. Reference teams should assess needs and, if necessary, organize the offer for these people. It may be behavioral therapy and pharmacotherapy in primary care. Group activities should also be offered to these individuals to promote adequate and healthy eating and physical activity, but taking into account the need for a specific group for overweight individuals to feel more welcome in a group with the same characteristics.[15]

Conclusion

Public health plays a fundamental role in monitoring and attentioning these comorbidities that affect road workers. This experience report, the results of which were obtained through the Road Health Project, made by Rodo Rede do Posto Ipiranga. Although the network has conducted public-private partnerships, such as vaccination and lectures given by the Federal Highway Police, the government has carried out a very discreet work in relation to the meaning that this type of project has for the community, for health workers, as well as for those who participate in it making the care.

Projects and research need to be promoted by the government to these workers, who have little or no time to seek a basic health unit or a public hospital through which they pass.

The health policies currently developed in the field of health promotion and disease prevention are still very limited to a place of convenience for those who work there. The mentality of work within the institution is part of a cultural process that is difficult to break.

The results of this study brought the profound need for organizational changes, logistics and even in the management of health services. They had a significant number of people driving on the road in unhealthy conditions. They are people who devoid of knowledge and time leave self-care always to the third plane. Also regarding the results is the praise to those who carry out projects of this large, like this Project, many others could be developed in the most diverse forms of execution.

And finally, there is gratitude for the opportunity that health courses have on the occasion of the project in their regions. For the experience achieved in each project and for the skills developed during academic training.

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