Report of the Action for Prevention and Care of Health Aggravates of Waste Pickers in the Federal District, Brazil

Date and place: On May 25th, 2019, an action was held in the Auditorium of CREAS (Specialized Reference Centre for Social Assistance), Estrutural City, Brasília, Brazil.

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Background: According to the Brazilian Ministry of Health, workers' health should meet the principles of universality, equity, integrality and social control that govern the Unified Health System (SUS). The expansion and dissemination of knowledge about working conditions and their consequences for workers' health should be encouraged and expanded for the knowledge of the entire population. For a long time, the working conditions of recyclable waste pickers in the Federal District (capital of Brazil) have proved to be inappropriate for the human condition. Health consequences include vision problems due to sun exposure for long durations, noise-induced hearing loss, which has a cumulative insidious pathology meaning it worsens over the years of noise exposure (Simone Adad et al, 2002), and hypertension. Each can be related to work under the presence of certain risk factors and are associated with sufficient and consistent epidemiological evidence of excess prevalence of disease in certain groups of workers (Dantas, 2003).

Objective: The purpose of this action was to offer health promotion activities for waste pickers, focused on vision and hearing investigation, blood pressure measurement and integrative health practices.

Description of Actions:
The action was held at the CREAS (Specialized Reference Centre for Social Assistance) of the Estrutural City, which is located about 20 kilometers from the center of Brasilia. The objective of this action was the promotion and prevention of waste pickers health problems. The activities developed in the action were:

1. Vision examination;
2. Otoacoustic emission test;
3. Integrative health practices;
4. Blood pressure measurement.

1. Vision Examination:
The vision examination was performed after the visual acuity test. This test aims to evaluate the vision's ability to perceive the shape and contour of objects. Through it, one can determine how a person sees the details of a word or symbol at a certain distance. The waste pickers during the work at the open dump were exposed to the sun, dust, toxic gases and toxic liquids that could occasionally hit the eyes, and these several risk factors can cause eye irritation and vision problems. The visual acuity test was used as a screening tool to select collectors who experienced...
some change in vision to undergo the vision examination. The demand for the vision examination emerged after activities performed with a group of collectors during the month of February 2019 pointed out most of the collectors participating in the course had vision problems. In the end, 60 collectors were selected for the examination that took place on Saturday, May 25, 2019. From the results of the evaluation, 3 collectors were referred to undergo the surgical procedure of cataract removal, and the remaining 57 chose glasses and finished the treatment.
2. Otoacoustic Emission Test:
Exposure to high noise levels is associated with activation of the autonomic nervous system and the endocrine system. This leads to hypertension, changes in hormone levels, prolonged response to stress and production of cortisol in the body, leading to cardiovascular disease, stress, sleep problems and poor psychological health (https://www.whwb.org/2019/05/non-auditory-health-effects-of-noise/). Knowing that waste pickers work for most of their lives exposed to excessive noise from trucks and machines, otoacoustic emission tests were performed to detect small lesions in the hair cells of the human ear, which are responsible for capturing the sound and when exposed to extreme noise for a long time, lose their function. The objective of this screening was to evaluate the integrity of these cells and detect any type of hearing alteration present. At the end of the screening, 17 otoacoustic tests were performed and according to the result of the evaluation, if any alteration was present, the waste picker was referred for follow-up and monitoring of the hearing problem found.
3. **Integrative Health Practices:**
Integrative health practices are treatments that use therapeutic resources based on traditional knowledge. They are aimed at preventing various diseases such as depression and hypertension as well as acting in the promotion and maintenance of health, and are aligned with the WHO health guidelines. Integrative health practices promote a new culture of care, strengthening the therapist-patient bond, the empowerment of the individual, and their protagonism in the process. They do not compete with conventional treatments, they only complement and enable an integrative look at health. In all, 40 activities of integrative health practices were carried out with the collectors who were waiting for the exam.

4. **Blood Pressure Measurement:**
The purpose of this action was to promote health. The monitoring of blood pressure served to reinforce the daily care that must be taken to avoid hypertension and other associated chronic non-communicable diseases. Early diagnosis and control of hypertension are extremely important to prevent risks of cardiovascular and renal diseases and even vision problems because the increase in blood pressure produces changes in the vascularization of the choroid, retina, and optic papilla [...] (Jacomini & Hannouche, 2001).
**Results:**
Of the 60 ophthalmological examinations performed, 5 were referred for surgery for presenting cataract problems. As for the otoacoustic emission tests, 17 were performed and only 3 presented some type of hearing loss that in the future will be referred for monitoring and evaluation of the hearing problem to the clinic of the University of Brasília. Blood pressure measurement was performed in the 60 waste pickers who were waiting for the test and only 5 of them had above-average blood pressure and were referred to the health center. Unfavorable socioeconomic conditions expose waste pickers to chronic non-communicable diseases like hypertension. In their workplace they also are exposed to chemical and physical risks such as noise, dust, sun exposure, toxic gases, toxic liquids, and others. The combination of these various risks can cause:

**Final considerations:**
The actions for the collectors proved to be very positive. This program intends to continue these acts of prevention and care of health problems including other partnerships and activities, besides trying to involve the population in the development of the actions and the positive impact they bring to the community. On June 24th, 2019, the glasses were delivered to the waste pickers at the CREAS (Specialized Reference Centre for Social Assistance) of Estrutural city, Brasília, Brazil. The waste pickers were very grateful and thankful for all the activities that were carried out, especially with regards to the vision examination and donation of the glasses.

1. Delivery of the glasses
2. Delivery of the glasses