Evaluation of the System of Occupational Medical Surveillance of the exposed workers to the ionizing radiations in the primary attention of health in Cuba.

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Summary
With the objective the operation of evaluating of the System of Surveillance Prescribe Occupational in the universe of the hard-working exposed ocupacionalmente to the radiations ionizing. in the Primary Attention of Health, we inspect 100 labour clinics of the whole country, as well as the behaviour of the mobility of these during 15 years of exhibition. Concluding that it is satisfactory the work of the team multidisciplinary with their actions of health directed to the worker and the labour means and that the pathologies diagnostician don't keep relationship with the effects on the health that you/they can cause the radiations ionizing.

Introduction
Keeping in mind that the prevention of the labour risks imposes us multiple challenges. The first one is to get an approach multidisciplinary to the problems that arise in the labour centers, so much to measure them and to evaluate them correctly like to solve them. The second to have the responsibility of to foresee and to promote actions of health guided to the minimization of this risks in the labour environment.

The Health System of Cuban besides having a state and gratuitous character, possesses laws that aid and they protect the exposed workers to any type of risk, he/she has designed systems of surveillance in which you/they involve at all the levels of the medical attention (primary, secondary and third)

The work was carried out starting from the integration of the consultations of Radiological Health in the primary attention of health, the same ones have had very satisfactory results and they have contributed new elements to the System of Surveillance in this group of exposed, being stood out the roll of the team multidisciplinary with its actions of health directed to the worker and the labour means in which is.

Each labour center consists with a team medical multidisciplinary conformed by the personnel medical and paramedical , technician of Health and Security and the representative of the Union that execute among its countless functions the surveillance occupational doctor, specialist doctors also exist in occupational health with those which you inter consultations the patients that cannot be solved through the Dispensarization by the clinical square of their pathologies.

In the Ministry of Public Health of Cuba two responsible Viceministerios exists that guarantee the health and the workers' security and of the implementation of the Systems of Surveillance. In the flowchart we show the effective interrelations, with which is achieved that the teams multidisciplinary and labour Clinics work appropriately.

Interrelation of the Viceministerios that guarantee the Primary Attention of Health in the labour clinics.
**Materials and Methods**
The evaluation of the System had two stages:

I. Inspection to the Labour Clinics, according to the guide made for such ends, evaluating ten (10) parameters:

II. Valuation of the mobility in the workers with 15 years of exhibition.

**Procedures:**
100 labour clinics were inspected:
Evaluating the current state of the established documents for the control of the universe of the TOE like they are:
- Registration of the Surveillance Radiological Individual
- Registration of the Zone Radiological Surveillance,
- Registration of the Surveillance Occupational Doctor
- Inspection Registration
- Individual Files of the TOE
- Registration of Training and Training of the TOE.
- Registration of control of teams
- Registration of maintenance of teams

**RESULTS:**
According to the guide,

1. 85% of the clinics has the actuality registrations
2. 89% of the teams multidisciplinary carries out the inspections monthly, according to that settled down.
3. 80% of the records satisfactorily was made.
4. 91% of the exposed workers uses the individual means of protection correctly
5. 98% uses the dosimeter correctly, while 89.5% doesn't keep it in the suitable places.
6. 87% of the clinics possess the documents effective regulatorios.
7. 40.5% of the teams multidisciplinary presents difficulties in the evaluation of the risks.
8. 87.7% showed to have domain in the topics of Radiological Protection.
9. 97% carries out the medical checkups according to that settled down.
10. 100% of the Administrations sustains satisfactory relationships of work with the team multidisciplinary.

II: In the second stage we value the behaviour of the mobility in the TOE, proceeding to the classification according to age, sex, you practice and occupational dose:

The studied sample was of 70 hard-working ocupacionalmente with 15 years of exhibition to the ionizing radiations, according to the registrations we could appreciate that significant differences don't exist as for the prevalencia percentage for the different pathologies, the results didn't allow to settle down direct causal relationships between the observed illnesses and the occupational levels of dose.
The general mobility and it specifies for sex and age doesn't differ of the one not observed in the workers exposed to the ionizing radiations of those labour canters.
The prevalencia of it was increased directly in connection with the age for almost all the opposing pathologies.
The evaluation of the System allowed us to identify a group of necessities and such achievements as:

- Automation of the information
- to Include in the training program to other specialists as they are the haematologists, oculists, psychologists, dermatologists, internists
- with those which you inter consultant the universe of TOE so that you familiarize with the medical aspects and of radiological protection.
- to Deepen in the topic of evaluation of risks, to obtain better results that contribute to develop methodologies that allow them to control them and to minimize them.
- to Revise the program of existent training, including the following topics:
  1. modernizing the normative ones effective,
  2. identification and evaluation of risks
  3. radiological emergency
  4. actions of security and health to minimize the risks in the labor environment.

**Introduced changes**

1. Better interpretation of the results of the dosimeter
3. Cohesion of the team multidisciplinary in all the tasks of health and security
4. The developed actions have contributed with the decrease of the doses
5. A better use of the individual means of protection exists as well as of the dosímetros, that which denotes the demand of the members of the team multidisciplinary.

**Conclusions:**

1. The effectiveness of the System of Surveillance, is reflected in the changes introduced by the cohesive work of the team multidisciplinary, what contributes to improve the health, quality of life and the sanitary education in this labour sector.
2. They were not attributable pathologies to the exhibition to the radiations ionizantes

**Recommendations:**

To inspect the development of the Surveillance Occupational Doctor systematically in the whole country.

**Reference:**