EVALUATION AND PERSPECTIVES OF THE WORK-RELATED ACCIDENTS SURVEILLANCE SYSTEM (WRASS) OF PIRACICABA

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INTRODUCTION

Work accidents are the worse risk to Brazilian workers’ health. Since 1970, when the systematic national records were initiated, over 30 million accidents were registered, with over 100,000 absolutely avoidable deaths among productive and young Brazilians.

One of the obstacles for the planning and implementation of accident prevention policies at work is the little effectiveness of the information, once it concerns only a small percentage of the jobs in the formal economic market.
Evolution Worker’s Health at Brasil

- In Brazil, the Workers’ Health Surveillance was incorporated to the Public Health System in the Federal Constitution of 1988 through the Organic Health Law (Federal Law no. 8080 of 1990).

- Workers’ health becomes, then, a Public Health matter, granting workers’ health reference centers, programs, and Sanitary Agents from the Public Health System the prerogative of supervising work places, what was previously the task of the Ministry of Labor through its Regional Departments.
Principles of Workers Health Surveillance System at SUS

- the integration of actions (assistance and prevention);
- the universality of the way the action reaches workers, regardless their employment status;
- the social control through the direct participation of the workers and their representatives;
- the inter-institutional and interdisciplinary action, involving at least the health, labor, environment and social security areas;
- the participation of teaching and research institutions (research-intervention);
- and the transformation character of the actions in a way to act over the conditioning and determining agents of the risks to workers health.
The Context: Piracicaba City

- With 318,384 inhabitants, Piracicaba is about 150 km from the capital city of the state of Sao Paulo.
- It is situated in the industrialization extension area which has been formed over the last few years along Anhanguera highway towards the state countryside.
- The city has the characteristics of a non-sustainable growth model, with consequent risks to the environment and the populations’ heath.
- Piracicaba has a varied and complex industrial park, with important companies in the metal production, mechanic, paper and cardboard, food, and energy (alcohol production).
- The economically active population of the city was estimated in 127,143 workers in 2003, being 79,273 formally employed and 47,870 informally employed.
Characteristics of WRASS:

- The information which feeds the system are obtained in emergency rooms and hospitals;
- the System has a universal range within the city, involving all the work accidents taken place in Piracicaba, regardless the nature of the employment status of the worker towards the company – if any, its work place, or place of living.
- The system works potentially in real time, i.e., the system can identify an injured worker being cared for in an emergency room, immediately initiating the surveillance actions.
- The surveillance and health promotion actions are initiated by the identification of sentinel events (like SENSOR - USA)
- The analysis of space distribution of work accidents, as well as their related occupational hazards, is a basic tool in the elaboration of surveillance strategies to accident victims and accident prevention policies.
METHOD of WRASS:

- In Piracicaba, workers who need medical care resulting from work accidents are cared for in 8 places in the city: five municipal emergency rooms and three hospitals.

- After Municipal Decree at 2002, the notification of the care to any injured worker in hospitals or emergency rooms became compulsory, regardless the worker’s employment status.

- The decree determines that the notification is done by filling out the Work Accident Victim’s Care Report (WAVCR).

- This form has fields for the identification of the worker, his/her occupation, company of employment (if applicable), worker’s home address and place of the accident, description of the accident and clinical data.
METHOD of WRASS:

- It is conjointly filled out by receptionists, nurses and doctor who provided the care.
- After the training of emergency rooms teams in the city (receptionists, nurses and doctors), the key question asked when an accident victim enters the emergency room is: *What were you doing at the time of the accident?* After that, the accident is classified as work accident or not.
METHOD of WRASS:

- WAVCRs are collected daily and their information is input in a computer system especially designed to store and manage these data. From these data, the system identifies severe accidents to be investigated, which are selected when they meet at least one of the following requirements:
  - Fatal accident; multiple traumas; crushing; amputation; perforation with loss of substance; brain trauma; spinal column fracture; spinal marrowbone wound; visceral wound trauma; 2nd or 3rd degree burnt; work accidents with individuals under 16 years of age.
METHOD of WRASS:

- The accidents selected according to the criteria above are investigated by means of supervising the accident place in order to identify its causes, and performing preventive measures to avoid similar incidents.
- During these inspections, an investigation form is filled out, beginning with an interview with the victim and his/her colleagues, using the Causal Tree method of investigation, when necessary.
- SUS Professionals, researchers and unionists from the institutions which develop the WRASS participate the investigations.
METHOD of WRASS:

- Legal instruments of the City Hall of Piracicaba and the Ministry of Labor and Employment are used in the reporting and adoption of preventive measures.

- All the information produced in these investigations are also stored and managed by the computer system, generating periodical reports.

- The inspection aims at identifying causal factors of risks of new accidents in order to eliminate these factors.
FIRST RESULTS

- At a year **5,430 WAVCRs** were filled out and entered in the system, with an average of **15** accidents per working day, with a annual proportion of work accident cases of **4.2%**. (official records are **1.6%** per year)
- **82%** of accident are from **formal** market and **18%** from **informal** market
- The area of economy with the highest amount of work accidents is **civil construction** (12.6%).
- The professionals with the highest incidence of work accidents are **farmers or rural workers** (6% a year).
FIRST RESULTS

- **Age** range most important is **20-29 years** – (4.0% incidence by year)
- 90% of accidents are cared at **public health system**
- **Machine and equipment** represent the most important cause of accidents (24.2 %)
- 139 (2%) were severe accidents and selected for investigation.
- The investigation is linked with social negotiation process (ex. Construction sector, backing, paper factoring)
The WRASS- Piracicaba Promotes:

- A better understanding of the existing risks through epidemiologic criteria, with systematically collected information and records;
- The combination of the information sources (hospital, formal register, rescue etc)
- The initiation of impact actions or collective actions, making the most of preventive actions in companies and areas of economy, with social control;
- The integration and improvement of the actions of the several institutions involved (Local health system, unions, Ministry of Labor, universities, etc), with mutual strengthening and better development in the exercise of its attributions,
- Overcoming fragmented inspections and isolated actions, which are still predominant characteristics of the work health area;
The WRASS- Piracicaba Promotes:

- The initiation of collective actions and negotiations, with a more solid knowledge and risk prevention in certain areas of the economy or in certain geographical areas, as required by the cases;

- The stimulation of collective actions and active participation of governments promote a favorable environment to prevention, as this participative process can facilitate the inclusion of several sectors and organizations representing the civil society.
DISCUSSION

- The WRASS-Piracicaba is an attempt to overcome the traditional gap existing between the Sanitary Surveillance and the Epidemiologic Surveillance, once the information and the action are strictly associated as they are components of the same system.

- Regarding the presented potentialities, some critical aspects stand out, such as the difficulties in constructing and managing the Georeferenced Information System and the lack of human resources for the development and consolidation of the system.
DISCUSSION

- The major difficulty, however, seems to be achieving and keeping the participation of the city’s emergency care teams in the system.

- Before these results, many work health services in the area of Piracicaba have tried to implement hospital-based notification systems.

- The initiative of WRASS contributes as a reference to meet the priorities of the National Network Care to Workers’ Health (NNCWH).
SIVAT - Sistema de Vigilância em Acidentes do Trabalho

Ambiente de trabalho

INSS

CAT

Pronto Atendimento

Resgate Municipal CB

Boletim Ocorrência (BO)

Formulário do resgate

PST MTBE

(PST Piracicaba, 2001)

INSS

Ambiente de trabalho

VIGILÂNCIA

Delegacia de Polícia

Informação

autuação/prevenção

seleção graves/fatais

COMSEPRE
Negociação coletiva prevenção

MTBE
PIRACICABA EM DEFESA DA VIDA!