

THE PROGRAM OF ROAD ACCIDENTS' PREVENTION IN THE FRAME OF ITALIAN PANORAMA

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INTRODUCTION

The prevention of road accidents were only recently enclosed among the priorities of the Italian National Health Program recognising in the life style and prevalent cultural orientation the origin of this phenomena that causes, according to the health statistic, 8.000 fatalities, 20.000 invalids and 170.000 injuries every year.

This huge amount of tragedies (higher by one third in comparison with official police sources), should be even more severe taking in consideration distortions that occur during the data collection and transmission, hindering the real acknowledgement of the quantitative data.

Besides that, there is a problem of the analysis of the qualitative data that hardly offers a review of causes and risk factors.

The data distortion, closely related to the prevention of accidents, influences negatively the possibility of the prevention to tackle the specific risks and definitely to improve the road safety in systematic and coherent way.

This paper presents an integrated pilot project in the city of Caserta, that puts together all principal actors involved in the process of the collection data and the prevention of road safety in order to stabilise a common referential schema based on synergies and collaboration.

1. CURRENT PROBLEM OF THE ROAD ACCIDENTS' PREVENTIONS

The preventive measures of road accidents activated in Italy till now only rarely adopted scientific procedures based on the clear individuation of risk factors, successively tackled by preventive actions which effect is systematically monitored and evaluated. The prevention is fragmentised, not systematically activated and discontinued on the national, regional and local level, so that the sum of preventive interventions undertaken in these years don't generate the critical force to be efficient.

1.1. Epidemiological data

The statistical information is fundamental to individuate priorities and aims of prevention as well as common design of proceeding, on condition that this information reproduce reality in fidelity way. The knowledge of the accidents' distribution and its causes in the Italian territory represents deficient and distortion that makes epidemiological data unreliable.

The first discordance exists between the sanitary data that indicates the amount of mortality and morbidity one third superior respect the official data provided by police sources.

Besides that unexplainable differences in the mortality and morbidity exist region by region caused by different attention given to the collection data on the local level: for example the province of Cuneo, first in the unhappy poll position of mortal collisions, registers 25 deaths on 100.000 inhabitants, while Naples indicates unreliably only 3 deaths on 100.000 inhabitants (one half of the United Kingdom – best in the world). But in the same region of Naples it is possible to observe the important fluctuation in the data collection, beginning already with the province of Caserta that declares 9,5 deaths on 100.000 inhabitants.

Of course the different weight of statistical evidence has an effect on the public decision and policy; in Cuneo the prevention of road accidents represents the absolute priority, while in the Naples' regional policy the prevention is taken in consideration only marginally. In fact the prevention isn't inserted among the priorities of the Regional Health Programmed despite the recommendation made by the National Health Programme.

Similar lacks and distortions are possible to observe regarding the individuation of risk factors: chronically known implication of alcohol and drugs in the road accidents – estimated by the Istituto Superiore della Sanità (health surveillance centre) about 30%, results to be effectively involved only in 3% of car crashes. This unreliable prevalence given by the official sources is a consequence of the absolute deficiency of alcohol control, not only for preventive purpose, but also in the case when the accident takes place.

1.2. Some innovative experiences

The attempt to overcome this disprovable situation on the central level was undertaken by the collaboration of the Ministry of Infrastructure and the Istituto Superiore di Sanità (ISS) with the project DATIS, focused on the data collection and the definition of the risk factors, tackled in the second moment by the specific action.

From this important experience is born the project CASCO 2000 which aim was to monitor the use of helmets after the introduction of new legislation that obliges all motorcycles to use this security equipment. The project, extended on the whole national territory, puts in network 57 local health organization, permitting to institute the system of national surveillance called the SISTEMA ULISSE. Accordingly with the previous European project Sartre, the results obtained indicate the halved utilization of helmets and seatbelts in the South Italy in comparison with other geographical area, already insufficient if confronted with the rest of Europe.

The Department of the Prevention reveals some results' projection of the mentioned project Ulisse. In last three months the media frequency of the use of seat belts in the city of Caserta was 10%, the use of helmets was 36%, while in the near Maddaloni, that is a part of the province of Caserta, the use of seat belts was 0,33% and the use of helmets was 10%.

2. THE CURRENT SOLUTION AND THE URGENCY OF EFFECTIVE MEASURES IN THE FRAME OF THE ROAD SAFETY POLICY

2.1. The necessity of integrated central policy and inter-institutional territorial collaboration

The recent acknowledgement that only the collaboration based on synergies and complementarities among all parts implicated in the transport policy can bring a real improvement in the road safety, puts together 5 Ministries to design The General Guide (Min. LL.PP.; 2000) for the activation of the National Programme of Road Safety, perfectly in line with the European policies.

As pointed out previously, the co-operation of the central Institutions produced different results that permits the first general vision of the road accidents phenomena alighting risk factors versus protective factors common for the whole national territory. Nevertheless the detailed vision of the specific local factors is necessary to put in evidence, in order to evaluate the intensity of the common factors on the local level. In particular, it will be important to estimate some health aspects such as mortality, the first aid, the severity of lesions, invalidity, health cost and so on).

Some Italian regions has already realised research projects in collaboration with ISS that had consented to define the practical way of reliable data collection on the local territory (Pordenone, Venezia-Giulia, Emilia-Romagna).

2.2. The Integrated Program of the road accident prevention

S.I.P.Si.Vi. in collaboration with the Local Health Organization of Caserta have proposed the integrated Programme of the road accidents' prevention that wants to activate the collaboration among the National Institutions (ISS, Ministry of Health, Ministry of Infrastructures) Regional Institutions (Health council Department), Province Institutions (Prefecture, Province of Caserta) and Local Institutions (Emergencies, Municipality, University) with private social entities (S.I.P.Si.Vi.), in order to set up a common frame of work. This agreement among all partners will allow the comparison of different audit system and the homologation of the procedures as well as of the preventive interventions and the research.

The comparative investigation with the province of Cuneo and Milan, available to disseminate their good practices already set up, is foreseen.

The principal goals are:

- to set in gear the sanitary system surveillance in order to enhance knowledge about risk factors
- to reduce mortality and morbidity as well as the amount of road accidents

In the frame of the Programme, the principal action is represented by the organization of the Permanent Epidemiological Observatory which tasks will be:

- The revision of extent schedule. The content of the schedules will be rectify to obtain pertinent information for individuation of the risk factors; unfortunately, the current practice doesn't consent in many cases the reasonable analyse of accidents' causes.

- The revision of data collection procedures
- The revision of data transmission. For example the province of Milan reveals that one third of their data is missed before they are registered on the central level.
- The formation of the data surveillance system

In accordance with the National Programme of Road Safety, a particular attention will be put on the surveillance of the utilisation of the safety equipment like seat belts, helmets, child seats and DUI.

Besides that we want to enrich the knowledge regarding the implication of behavioural factors in road safety setting up specific research to run in the future.

This first epidemiological part will be followed in brief by the phase of prevention interventions developed by all partners singularly or in collaboration, within the common model adopted by the ISS (F.Taggi et al., 2001): epidemiological data – individuation of risk factors – preventive interventions – evaluation of efficacy through epidemiological indicators.

The objectives of the preventive part is:

- To double the frequency in the use of safety equipment as seatbelts, helmets, child seats
- To enhance the awareness of the population through education, information and enforcement
- To enhance the practical knowledge of first aids among specific targets.

All interventions will be divided in 3 clusters that reflect different levels of target intervention:

The 1° level includes all actions focused on the avoidance of the accidents:

- Road safety education in all types of schools and Guide schools (S.I.P.Si.Vi., Department of the Prevention, Addictive centre, Police)
- The organisation of "protected path for school children" (S.I.P.Si.Vi., Municipality, Police, Associations, merchants, parents, teachers)
- Systematic road safety campaign focused on the risk target
- Increasing of the number of alcohol controls

The 2° level includes all actions focused on the minimization of the consequences during eventual accident:

- Enhancement of the seat belts
- Enhancement of the use of child seats
- Enhancement of the use of helmets

The 3° level includes all actions focused on the minimisation of the consequences once an accident has happened:

- The dissemination of the practice knowledge of the first aid in particular groups (policemen, firemen, professional drivers)
- The dissemination of the practice knowledge of the first aid in particular in general population, in particular in schools and guide schools
- The rationalisation and the improvement of the services of emergency

The evaluation of the efficacy of all preventive actions will be measured through the indicators individuated and defined on the base of prior data.

The Programme is conceptualised as a work in progress with gradual activation of the specific interventions, sustained from the central organs where possible.

After the definition of all collaboration, the programme will be presented on the Congress of Road Safety where will be signed the convention among all authorities of the city of Caserta.

The constitution of the network established on the synergies and collaboration embodies the hope that the prevention of the road accidents may be conducted on the base of scientific procedures and evidence, translated directly in a greater number of lives saved.