

HIGHLIGHTS OF PROJECT NO. 5:

POISON CONTROL

Lead Nation: ITALY

Project Director: Professor Sergio Magalini
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PROJECT OBJECTIVE:

- To study, assess and recommend minimum international standards for acute poisoning prevention and intervention

INTRODUCTION

The last of the five special projects of the EMS Pilot Study examined poison control systems in participating nations. Its purpose was to develop a model poison control system that could be replicated by developed and developing nations throughout the world. Another intent of the study was to develop minimum international standards for preventing and treating poisoning incidents.

Italy was the lead nation of this project, headed by Professor Sergio Magalini.

The chapter discourses (1) the project methodology; (2) its accomplishments at the national level; (3) progress made at the international level; and (4) the Pilot Study's recommendations for future action in the study area.

METHODOLOGY

The methodology for the project was established in January 1979 by the Pilot Study Executive Committee. The project staff's first step in developing a model poison control system was to contact experts in the field of poison control in various European countries. Several poison control systems already in operation were studied. The staff also examined various methods of collecting data, treatment methodologies, and types of epidemiologic and demographic data that would be needed for the system.

Under the leadership of Professor Magalini, a model computerized Poison Control System was designed. It consists of:

- A mechanism to create and update a common core data bank on poisoning agents, toxicology, and treatment
- Basic protocol for data storage, recall and display
- Treatment protocols
- Parameters for system access, utilization and education of health care providers and the general public
- Administrative, organizational and personnel considerations of the poison control system at the regional and treatment level

The project staff then:

- Established an acceptable format for collecting epidemiological and demographic data
- Evolved a model for multicentric preliminary evaluation of the data and clinical results generated by the system
- Established a schedule of events for the project staff

PROGRESS AT THE NATIONAL LEVEL

Italy now boasts a model Poison Control System, which has perhaps the most effective and efficient information system of its kind in the world. Over 10,000 cases have been processed in the last few years. Italy's Poison Control System consists of:

- A comprehensive data bank on poisoning agents, toxicology and treatment methods for responding to poison incidents
- A computerized central information system that stores information on:
 - 8,000 product names
 - 6,500 generic or chemical names
 - 630 vegetable and animal denominations (common and scientific)
 - 263 different uses, and
 - 400 symptoms
- Three Poison Control Centers (in Bologna, Genoa and Chieti), each of which through its own terminals has access to both the main information data bank and a reserved computer space to accumulate, analyze and evaluate its own clinical data. In addition:

- Each center has partial access to the clinical data banks of the other centers -- partial, in that patient identity and other confidential information are excluded in order to protect patients.
- Each center, moreover, has full autonomy in reaching clinical decisions and the capability to generate independent data banks on its own cases.

Video terminals have been installed in Italy's three operating Poison Control Centers. Other cities and towns will soon have centers as well. These new satellite centers, once installed, will have (1) immediate access to the data already stored in other poison control centers and (2) a coordinated set of new clinical information on poison control cases in selected geographic areas.

PROGRESS AT THE INTERNATIONAL LEVEL

The project staff has also engendered considerable international interest in the Poison Control Center in Italy.

International information exchange has taken place since the outset. The project staff contacted international European experts on poison control from France, Belgium, and Italy, who were able to exchange information at international professional meetings. As evidence of the international interest the project has received, the project staff was invited to present details about the Poison Control Project at various international meetings.

EMS PILOT STUDY RECOMMENDATIONS

The following specific recommendations for improving poison control systems at the regional, national or international level, were endorsed by the delegates of sixteen nations who attended the September 14-16, 1980 meeting of the EMS Pilot Study in Munich, Germany.

1. The national poison control information system developed in Italy should be studied to determine its applicability in other nations.
2. National poison control information systems should:
 - Categorize hospital facilities by treatment capabilities so that poisoning victims are referred to the appropriate facility
 - Utilize epidemiological data to focus prevention activities on high risk populations

RECOMMENDATIONS (continued)

3. An acceptable international format should be established for collecting data to support epidemiological analysis, program operations, and system evaluation. Establishing a common format would enhance compatibility of data among nations.
4. Poison control centers to store, process and evaluate comprehensive information on poisoning incidents should be established as an integral part of the EMS system. These centers should also provide clinical services under medical supervision, and be associated with hospitals in the system.