

## Short Communication

# Management Instrument in Toxicology and Poisoning Field to Reduce Mortality Rate

Mauro Luisetto<sup>1\*</sup>, Ghulam Rasool Mashori<sup>2</sup> and Kausar Rehman Khan<sup>3</sup>

<sup>1</sup>Applied Pharmacologist, European Specialist Lab Medicine, Italy

<sup>2</sup>Department of Medical & Health Sciences for Woman, Peoples University of Medical and Health Sciences for Women, Pakistan

<sup>3</sup>Preston University Karachi, Pakistan

## Short Communication

In today healthcare poisoning and toxicology play a relevant role in the management of patient life. Often severe cases can produce heavily consequence in patient and even exit us. To correctly treat this event are needed great organization between all services involved: emergency department, ICU, hospital pharmacy, toxicological lab, poison centre, central public institution and other.

Only a right chain of event may produce a global positive effect and if only one unit involved not provide the right response all the process not go towards patient safety (global optimum-local optimum paradigm). [1]

To prevent this kind of event managerial instrument make possible a performance system so is really needed to apply management instrument and techniques in all level of organization from the top to the bottom in every component of toxicological medical equipe. Even if rare event this can be very complex situation: rare poison, rare antibodies needed, cases multiple (in ex terroristic attack), complex intoxication (Polonium) but many other condition.

Instruments like: project management, MBO, WBS, risk management, ICT, knowledge management, strategic management, time management, root causes analysis, Safety management systems, FMEA, critical path methods, total quality management, disaster plan, Gantt diagram, Eisenhower matrix, Data Management, Swot Analysis, learning by errors, Brian storming, lateral thinking, Deming cycle, change management and many other make possible to obtain results at level as request.

Also some management theory can produce the same effect: theory of constraints (E. Goldratt), seven hats and lateral thinking (E. De bono), social intelligence (Goleman), but many other used currently in other settings like business and economy.

**Citation:** Luisetto M, Mashori GR, Khan KR. Management Instrument in Toxicology and Poisoning Field to Reduce Mortality Rate. *Ann Clin Pharmacol Toxicol.* 2019; 1(2): 1008.

**Copyright:** © 2019 Mauro Luisetto

**Publisher Name:** Medtext Publications LLC

**Manuscript compiled:** August 02<sup>nd</sup>, 2019

**\*Corresponding author:** Mauro Luisetto, Applied Pharmacologist, European Specialist Lab Medicine, IMA Academy Pharmacy and Pharmacology Branch, Italy, E-mail: mauro65@gmail.com

**Keywords:** Management; Toxicology; Poisoning; Poison centre; Organization; Efficacy; Effectiveness; Risk management

## According Trisolini MG

“Most health care management training programmes and textbooks focus on only one or two models or conceptual frameworks, but the increasing complexity of health care organizations and their environments worldwide means that a broader perspective is needed. This paper reviews five management models developed for business organizations and analyses issues related to their application in health care. Three older, more 'traditional' models are first presented. These include the functional areas model, the tasks model and the roles model. Each is shown to provide a valuable perspective, but to have limitations if used in isolation. Two newer, more 'innovative' models are next discussed. These include Total Quality Management (TQM) and reengineering. They have shown potential for enabling dramatic improvements in quality and cost, but have also been found to be more difficult to implement. A series of 'lessons learned' are presented to illustrate key success factors for applying them in health care organizations. In sum, each of the five models is shown to provide a useful perspective for health care management. Health care managers should gain experience and training with a broader set of business management models” [2] and related article “New ICT Technologies to Improve Clinical Outcome in Toxicology and Poisoning” is clear the advantages played by ICT technologies and software's dedicate to manage HUB AND SPOKE regional and local antibodies stokes [3].

## Rashid Al-Abri

“One of the key concerns in Health care management is management of change and health care professionals are obligated both to acquire and to maintain the expertise needed to undertake their professional tasks, and all are obligated to undertake only those tasks that are within their competence [1]. Moreover, change occurs continuously around us. We may want to support it, be indifferent to it, and be passive or participate in it. The pace of change has increased dramatically.

Managing change is about handling the complexity of the process. It is about evaluating, planning and implementing operations, tactics and strategies and making sure that the change is worthwhile and relevant [3]. Managing change is a complex, dynamic and challenging process [4]. It is never a choice between technological or people-oriented solutions but a combination of all [4].

## Matthias Briner et al. [5]

“Clinical Risk Management (CRM) plays a crucial role in enabling

hospitals to identify, contain, and manage risks related to patient safety. So far, no instruments are available to measure and monitor the level of implementation of CRM. Therefore, our objective was to develop an instrument for assessing CRM in hospitals”.

### Gunther Eysenbach et al.

“A strong majority of the literature shows positive effects of HIT on the effectiveness of medical outcomes, which positively supports efforts that prepare for stage 3 of meaningful use. This aligns with previous reviews in other time frames” [6].

### Ulmeanu C et al. [7]

“Acute poisoning, an important health issue in children can result in some cases in severe evolution and even death. The aim of the study is to analyze cases of death caused by acute poisoning which occurred in a ten-year-period in a Pediatric Toxicology Department in Bucharest.

For the purpose of the study all medical records of the deceased patients with acute poisoning between 1995-2004 were analyzed with particular focus on the following criteria: etiology, age, social environment, type of intoxication (unintentional or intentional).

Between 1995-2004, 46 fatal cases were recorded out of a total 8802 cases of acute poisoning (0.52%). The main two causes of death by acute poisoning were: caustics (16 cases 34.78%) and mushrooms (12 cases 26.08%), followed by carbon monoxide (7 cases 15.11%), pharmaceuticals (5 cases 10.86%), ethanol (2 cases 4.34%), pesticides (2 cases 4.34%), nitrites (1 case 2.17%) and lead tetraethyl (1 case 2.17%).

Although morbidity in acute poisoning is still high, mortality is low, the registered average being 0.52%. The main agents causing death are caustics and mushrooms, and the most affected age group is that between 1 and 5 years of age”.

## Results

Observing the result obtained in many businesses setting using managerial instrument is overdue to deeply introduce this also in healthcare setting involved in poisoning event and other toxicology event to improve the global clinical efficacy and effectiveness.

## Discussion and Conclusion

In order to improve mortality rate involved in poisoning and toxicological event is crucial to deeply introduce in every level (top and bottom) of organization management instruments.

Is possible that today in advanced countries related cases of polonium poisoning (hypothetic) with death of a young woman after more than 30 days not verified the etiological causes?

## References

1. Regional Congress 2019. The Emilia Romagna antibodies management SYSTEMS and drugs of abuse network. Ferrara provider University of Ferrara 10/06/2019 (Luisetto M presentation).
2. Trisolini MG. Applying business management models in health care. *Int J Health Plann Manage.* 2002;17(4):295-14.
3. Luisetto M. New ICT Technologies to Improve Clinical Outcome in Toxicology and Poisoning. *Open Acc J of Toxicol.* 2017;2(2).
4. Rashid Al-Abri. Managing Change in Healthcare. *Oman Med J.* 2007;22(3):9-10.
5. Briner M, Kessler O, Pfeiffer Y, Wehner T, Manser T. Assessing hospitals' clinical risk management: Development of a monitoring instrument. *BMC Health Serv Res.* 2010;10:337.
6. Kruse CS, Beane A, Health Information Technology Continues to Show Positive Effect on Medical Outcomes: Systematic Review. *J Med Internet Res.* 2018;20(2):e41.
7. Ulmeanu C, Nitescu G, Girnita VG. Mortality rate in acute poisoning in a pediatric toxicology department. *Przegl Lek.* 2005;62(6):453-5.