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The Management Strategy in Toxicology and Poisoning

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ABSTRACT

In a recent Italy regional congress it has been presented an oral presentation related the link between management science and the toxicology in order to improve efficacy of the organizations involved in the management od the poisoned patients. This argument was accepted with interest by the auditory (ferrara 2019 congress of antidothes and durg abuse management system and control provider university of Ferrara). Related poisoning and toxicology is crucial for the security of patients life a medical team whit all the professionality needed , the right avaibility of med. Lab tests, imaging , antidothes availability and other drugs stokes to provide the really best therapy. The same adequate and rapid system of information is relevant (poisoning centre, public institution, biomedical data bases, university library and other make the difference: Treating Poisoning deffen a lot from a normal pharmacological therapy because antidotes of then need of very dedicated dosage and posology to treat in very rapid way a real danger situation. (since death). So is possible to say that is needed : right emergency procedure, right communication system, right Clinicians (toxicologist, clinicians, imaging professionals , medicine laboratorist, clinical pharmacist Logistic pharmacist, epidemiologist, healthcare managers and others), right procedure, right Documentation (poisoning, antidotes) , right and rapid flux of the relevant information (availability of rare antidotes in other hospital or in regional or national antidotes stokes. also right ICT system, right information about antidotes stokes and time to obtain this in emergency. (rare antidotes, unconventional amount needed for multiple poisoning, disaster and other) Related toxicological test is requested to can receive results (first level or second level) In the right time to modify the therapy when possible. The correct availability of laboratory tests (toxicological, biochemistry and other). Decontaminant and depurative strategy (dialysis, emoperfusion, iperbaric therapy et other) need the same a great and efficacy management. (clinical, pharmaceuticla and organizative). in this work it will be used a image methods to better introduce the managerial instruments and tequniques Useful in industry but also in administration or health care system and so also in toxicological field. But also adequate management strategy are fundamental to control the complex process (poisoning) in very useful way. Efficacy and effectiveness of the entire process. Even if apical managers every day use this management instruments scope of this work is to diffuse to all component of toxicological bio- medical team the management basic concepts and theory and tools to obtain better clinical and economic results.

Keywords: *toxicology, poisoning, management strategy, problem solving, risk management ict, emergency department, sharing of the information, biomedical databases, mortality rate, clinical and economic outcomes*

INTRODUCTION

According editorial clinical pharmacist maim focus “the main focus of the clinical pharmacist must be applied in priority way to the most critical patients in order to achieve the best results available. In this condition even benefit of 1 life achieved in mortality rate is a real golden endpoint (we can think for example to a pediatric poisoning, or severe infectious disease in pregnancy or the effect of inefficacy immunosuppressive therapy in transplanted et other) . This can be considered in example as a reduction in NNT to improve a therapeutic

strategy". (15) Under the light of this approach isetical and correct to apply also managerial teqnuiques and strategy also in field of posioning and toxicology to adequate manage severe and complex events,like rare poisoning, disaster, Multiple poisoning, terroristik attack, nuclear events tha need a great organizative competence to Act in an unusual condition.

In order to prevent incidents , to reduce probability of errors , to right perfomr every activity involved in Management of the poisoned subject many managerial discipline can help in relevant way:

Total quality management

Quality control management

Risk and safety management

MBO managemet by objective

Project management- wbs work breakdown structure

Strategic magement- planning

Time management

Knoledge management

Data management, epidemiology

Ict management

Hta management

Problem solving

Facility management

Logistic management

HR management – leadership-teamwork-coaching

MBWA management by walking around

Change management

Supply chain management

Clinical pharmacist management

Disaster or scenario planning strategy and many other discipline .

Also some teqnuiques are universally consider relevant in managemet :

gantt diagram, root causes analisys, risk assesement, fmea, strategic analisys, swot analisys, deming cycle, critical path analisys, kaizen,brainstorming, problem solving, lateral thinking, budget impact analisy, benchmarking teqnique, pnl, transactional analisys by harris, team leadership, matrix organization, network organization, team building, decision tree, focus group, scenario planning, disaster plan, to do list, learninf by error, emotional and social intelligence management by goleman and many other. Attitudes and skills like : emotional intelligence, proactivity, no extreme thinking are only few example of right tools to be used in critical conditon like poisoning , disaster , or terroristic attack. Theory like : sun tzu : the art of war, taylorism, max weber theory eli goldratt, e.de bono, brainstorming, lateral thinking, eisen hower matrix, Gantt diagram many many other

Intruments Like

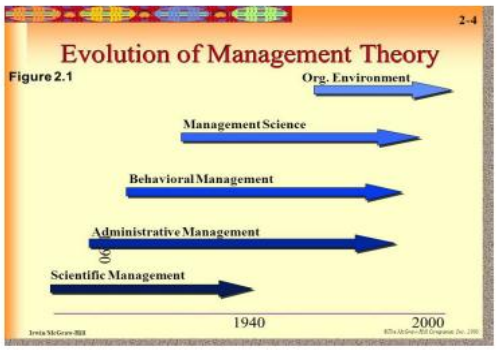
professional social media, researchgate and other make possible to have a great and rapid sharing of informations about single researcher, research topics, project and many other related kind of Relationship between different medical team also on distance.

This , usually integrated in every industrial of other economic or business activity as current way of work,Can produce high performance also in health care settings and also in toxicological events. So some theory and strategies are cited in this work to provide usefull intrument to be added to the classic Toxicological, clinical, laboratoristic epidemiological and other competencies. The poisoning event need of the best biomedical clinical information, as well as other critical healthcare procedure: the best healthcare professionals but also a right organization and the right intruments.

And to have a right organization at the level requested managemen instrument must be adequately Performed by healthcare organization and professionals (since from first phases of emergency call , pre hospital setting, to the Emergency Trasport system, to the rapid comunication of clinical information , to the laboratoristic assay, the antidothes availability to the H24 consultan service of the poison centre et other) since to the discharge phases. A very complex system cover H24 for every day in a year and many organization are currently involved.

The logistic of antidothes and other remedies (in example iperbaric oxigen therapy) need great organization to obtain clinical and economical results and the efficacy and effectiveness required by actusl healthcare standard (JACHO). Some relevant antidothes are produced in foreing countries and to be received the order must be sended to different countries (procedure that require many days to be completed) Related industrial revolution in first

1900 and to the military strategy a global kind of adminitration was introduced to get the better perfomance in an high competitive world Management is definied as the administration of an organization. (every kind of org.) It includes the activities of setting the strategy for an organization and coordinating the efforts of its employees to accomplish its objectives through the application of available resources, (financial, natural, technological, and human resources.) To manage: comes from to handle (italian languages maneggiare latin words hand and to act) First historic theory like sun tzu (the art of war) since from 6 th century BC.



Figuren1.

Nicolo' mcchiavelli (1515) the prince related political strategy of power in itlay. 1776 adam smith : the wealth of nation related division of work. Henri Fayol (1841–1925)in example considers management to consist of five functions:

- planning (forecasting)
- organizing
- commanding
- coordinating
- controlling

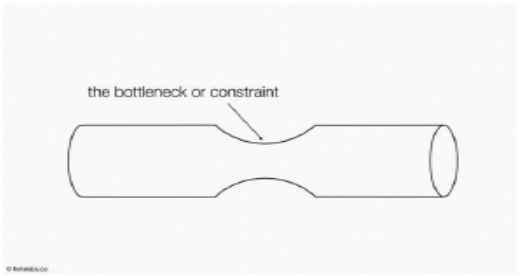
ManagementLEVEL : senior , middle and lower managers level At lowe level more technical and at the top more conceptual role. (piramid structure) HIGH level managers set the policyof the intere organization and make the more high relevance decision. Lower level: in example front line managers present more scientific - technical competencies

Basic roles:

- Interpersonal: roles that involve coordination and interaction with employees Figurehead, leader
- Informational: roles that involve handling, sharing, and analyzing information Nerve centre, disseminator
- Decision: roles that require decision-making Entrepreneur, negotiator, allocator

Management skills include:

- political: used to build a power base and to establish connections
- conceptual: used to analyze complex situations
- interpersonal: used to communicate, motivate, mentor and delegate
- diagnostic: ability to visualize appropriate responses to a situation
- leadership: ability to lead and to provide guidance to a specific group
- technical: expertise in one's particular functional area.
- behavioral: perception towards others.
- eli goldratt: TOC theory of constraints



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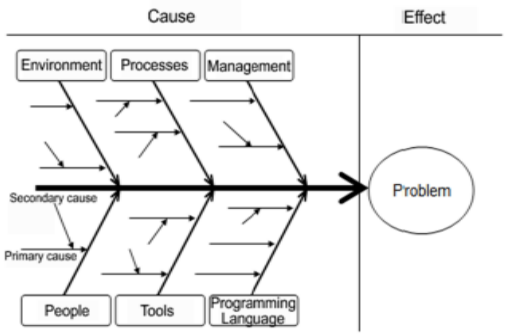
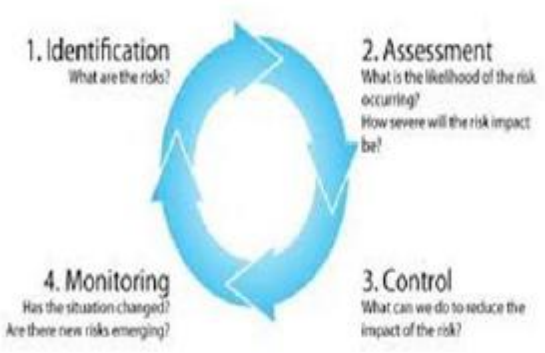


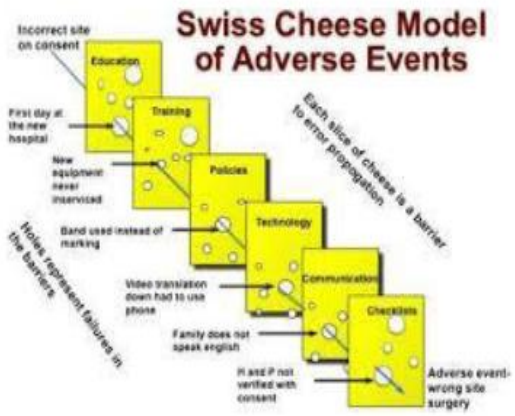
FigureN3. *Root Causes Analysis*

FigureN4.



FigureN5.

FigureN9. *E. De Bono Six Hats Theory*

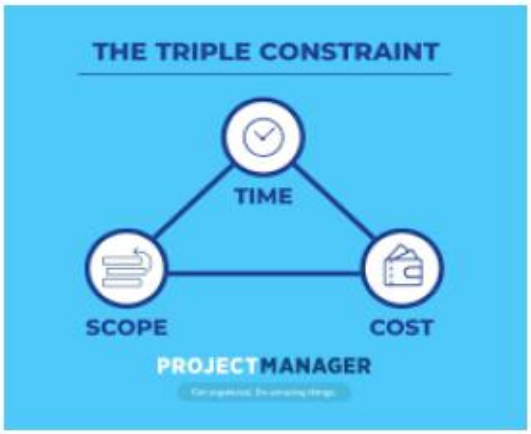


FigureN6.

FigureN10.

FigureN7.

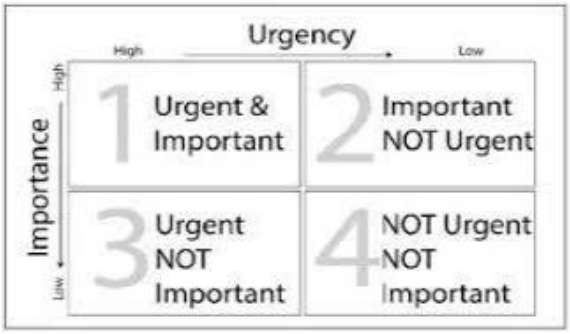
FigureN11



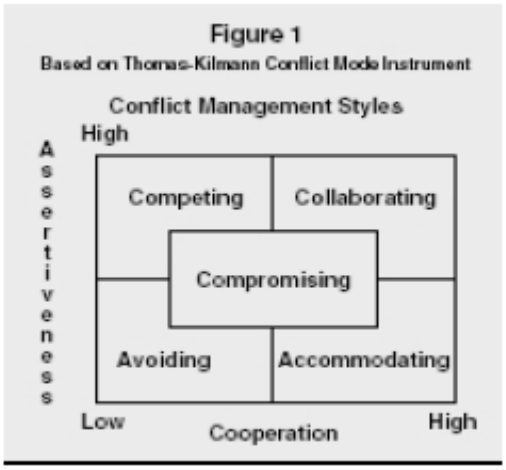
FigureN8.

FigureN12. *Gantt diagram time management*

FigureN13. *Swot Analisys*

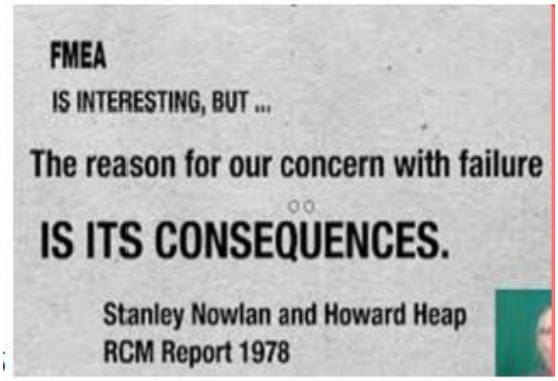


FigureN17.



FigureN14.

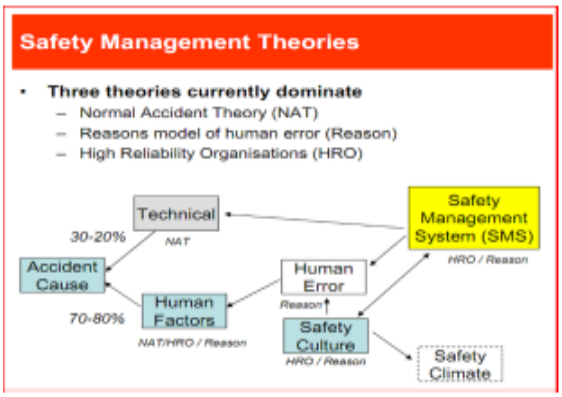
FigureN18



FigureN15.

Time Management

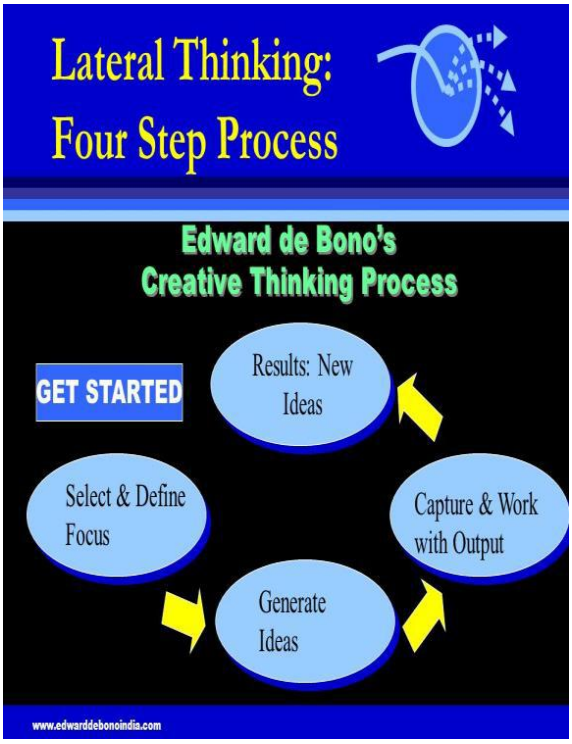
FigureN19. *Plan do Check Act Cycle*



FigureN16.

FigureN20.

FigureN21



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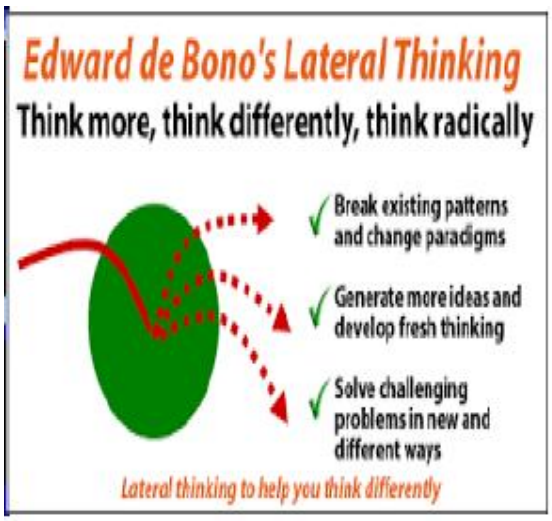

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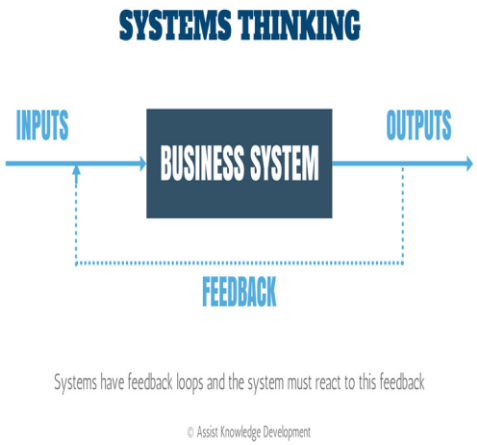

FigureN25.

FigureN26.

Other examples can be Taylor 1900 scientific management behavioral management 1900 u. Munsterberg (industrial psychologist) Gantts charts: 1910 for planning and scheduling max Weber 1900 administrator as bureaucrat theory Ronald fisher: 1900 statistical methods in management settings Patrick blackett : similar to the Taylor scientific management, mathematical principle applied in military settings public and administrative management theory Maslow and mc gregor human relation

movement , hierarchy piramids of need and theory x- and y quantitative management the contingency perspective contemporary management crisis management 1980/from : Guidelines for poison control II. Technical guidance-7. Antidotes and their availability "National distribution of antidotes who https: // www.who.int/ipcs/ publications /training_ poisons /guidelines poison_ control /en/index7. html "Demographic, geographical, and economic factors sometimes hinder the availability of antidotes. In addition, the high cost that results from infrequent demand and short shelf-life may prevent their widespread distribution. A central "bank" of antidotes could be an economic and effective means of ensuring distribution, and this should be organized by health authorities in such a way that any poison victim may be assured of receiving an antidote within the appropriate period of time.

Economic Aspects

When considering the cost of antidotes, governments should take into account the social and medical consequences of failure to treat poisoned patients in an appropriate manner and the continued economic burden on local or national resources that may ensue. In general, pharmaceutical companies will manufacture and supply antidotes only if they are encouraged by adequate economic returns for their investment and by simple registration procedures. To this end, governments should consider recent WHO recommendations1 concerning products for export and facilitate the registration of antidotes already evaluated and registered elsewhere.

If antidotes cannot be supplied by the pharmaceutical industry, other means of ensuring their availability should be considered. These could include the establishment of government manufacturing facilities, a manufacturing pharmacy laboratory, or a system that allows the importation of antidotes registered elsewhere.

Other ways of using resources efficiently, such as rationalizing the purchase and distribution of antidotes, should also be considered by health authorities and should take into account the time within which antidotes need to be available for use in treatment. Local transport conditions should also be considered. Antidotes needed immediately must be stocked at all hospitals, as well as in health centers or doctors' surgeries if the nearest hospital is some distance away. It may also be necessary to have certain antidotes available at places of work for use under medical supervision (e.g. in factories using cyanide). Antidotes needed within 2 hours can be stocked at certain main hospitals; patients can be taken to these hospitals for treatment or the antidotes can be transported - within the time limit - to the health facilities at which treatment is provided. Antidotes needed within 6 hours may be stocked at central regional depots, provided that there are adequate facilities for transporting them within the time limit. For all categories of antidotes, there is the further option of keeping a small amount, sufficient to start treatment, in stock locally, further supplies being obtained from a central source as required. Where certain types of poisoning are frequent, or in areas where certain chemicals are heavily used, the appropriate antidotes may be kept in ambulances, operated by physicians, that are sent out to treat cases of poisoning. Poisoning by natural toxins may be seasonal and may be specific to certain regions (e.g. snake-bites in rural areas during planting and harvesting seasons). Antivenoms may be sent to rural areas during these seasons to be readily available in case of need. The rapid transport of antidotes may be needed in certain circumstances, and appropriate advance arrangements should be made, e.g. for the use of official cars, aircraft, or trains. In certain situations, arrangements for the rapid transport of patients to hospitals with appropriate facilities and antidotes may be necessary. Comprehensive instructions on interim treatment measures should be given to first-aid workers or other medical or paramedical professionals.

Improving Availability

The difficulties experienced in obtaining antidotes for the treatment of poisoned patients vary from country to country. While research in certain areas by industry, and at the international level, could improve the general availability of antidotes, each country will need to identify its own particular problems and take specific action to solve them. A combination of measures will be required, and collaboration will be necessary between the various individuals and organizations involved."

MATERIAL AND METHODS

Whit an observational method some relevant literature (in our opinion) are analyzed in order to produce a global Conclusion to submit to the researcher an useful instrument to be deeply applied in toxicological setting To give to the severe poisoned patient the best organizative process.(1-14)

The same this instrument make possible to have a right instrument to manage also very complex situation in example due by terroristic chemical or bacteriological accatsk or multiple cases of intoxication (nuclear Incident and other).

All literature comes from biomedical databases like PUBMED or from other open access journal. After this review are analyzed the result of a practical experience in a public hospital setting (provincial hospital with about 700 beds PC area, with 4 hospital linked).

This Public hospital is linked with other provincial hospital and regional centre rear for antidothes. Hub and spoke system.

RESULTS FROM LITERATURE

Janati A Et Al

"Purpose Hospital manager decisions can have a significant impact on service effectiveness and hospital success, so using an evidence-based approach can improve hospital management. The purpose of this paper is to identify evidence-based management (EBM gt) components and challenges. Consequently, the authors provide an improving evidence-based decision-making framework. Design/ methodology/approach a total of 45 semi-structured interviews were conducted in 2016. The authors also established three focus group discussions with health service managers. Data analysis followed deductive qualitative analysis guidelines. Findings Four basic themes emerged from the interviews, including EBM gt evidence sources (including sub-themes: scientific and research evidence, facts and information, political-social development plans, managers' professional expertise and ethical-moral evidence); predictors (sub-themes: stakeholder values and expectations, functional behavior, knowledge, key competencies and skill, evidence sources, evidence levels, uses and benefits and government programs); EBM gt barriers (sub-themes: managers' personal characteristics, decision-making environment, training and research system and organizational issues); and evidence-based hospital management processes (sub-themes: asking, acquiring, appraising, aggregating, applying and assessing). Originality/value Findings suggest that most participants have positive EBM gt attitudes. A full evidence-based hospital manager is a person who uses all evidence sources in a six-step decision-making process. EBM gt frameworks are a good tool to manage healthcare organizations. The authors found factors affecting hospital EBM gt and identified six evidence sources that healthcare managers can use in evidence-based decision-making processes." (16)

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.2

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." (17)

Matthias Briner Et Al

"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. "(18) New instruments as professional social media can give more opportunity to meet researcher in healthcare field. Luisetto et al int. journal of economics and management sciences 2016 [18,19], Instrument to rapid share the information between healthcare professionals and to transfer research activities to practical settings"(19) And in article : New ICT Technologies to Improve Clinical Outcome in Toxicology and Poisoning. Open Acc J of Toxicol. 2017 Is reported that: "We strongly ask to international organization involved in hospital standard accreditations requirement to introduce as relevant instrument a informatics management system (cabinet informative or other systems) in logistics of antidothes.

This will make possible a correct management and to have available the right antidothes in right time for the safety of the poisoned patients

and also for professionals. As we have seen in example for emergency drug hospital systems we can have also a reduction in total costs providing an efficiency system. (Almost 53.000 euro in 5 years in an Italian public hospital) [14] we can think in example to total cost avoided if introduced in many national hospital. This kind of experience can be usefully translated to antidotes and toxicology filed in many hospital places. This modify in routine can reduce mortality rate due by due by incorrect antidotes stokes logistics improving also the clinical outcomes related. In example we can see that in different hospital also the stokes and availability in some classic antidotes as activated charcoal can be insufficient and related the cyanide antidothes we have see that this is not correctly available in the different world hospital situation related to the difficulty to of industries or other condition that contribute to the variability in the request). Also the logistics of rare antidothes is a crucial process (the expiration time control and ordering procedure of this molecules can be part of an inefficient systems if not adequately controlled). We can also see that a velocity management ICT strategy can gives improving in the efficacy of process related to logistics and to translate rapidly the relevant information in poisoning situations. In our conclusion adding the ICT power and the clinical pharmaceutical care competences and knowledge added to the toxicological medial team we can have more clinical results reducing mortality rates and healthcare costs." (20)

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" (21)

A El Taguri

"Health services have the functions to define community health problems, to identify unmet needs and survey the resources to meet them, to establish SMART objectives, and to project administrative actions to accomplish the purpose of proposed action programs. For maximum efficacy, health systems should rely on newer approaches of management as management-by-objectives, risk-management, and performance management with full and equal participation from professionals and consumers. The public should be well informed about their needs and what is expected from them to improve their health. Inefficient use of budget allocated to health services should be prevented by tools like performance management and clinical governance. Data processed to information and intelligence is needed to deal with changing disease patterns and to encourage policies that could manage with the complex feedback system of health. E-health solutions should be instituted to increase effectiveness and improve efficiency and informing human resources and populations. Suitable legislations should be introduced including those that ensure coordination between different sectors. Competent workforce should be given the opportunity to receive lifetime appropriate adequate training. External continuous evaluation using appropriate indicators is vital. Actions should be done both inside and outside the health sector to monitor changes and overcome constraints." (22)

Gunther Eysenbach Et A

"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." (23)

John Wright Et Al

"Problem: There are wide variations in hospital mortality. Much of this variation remains unexplained and may reflect quality of care.

Setting: A large acute hospital in an urban district in the North of England.

Design: Before and after evaluation of a hospital mortality reduction program.

Strategies for change: Audit of hospital deaths to inform an evidence-based approach to identify processes of care to target for the hospital strategy.

Establishment of a hospital mortality reduction group with senior leadership and support to ensure the alignment of the hospital departments to achieve a common goal. Robust measurement and regular feedback of hospital deaths using statistical process control charts and summaries of death certificates and routine hospital data. Whole system working across a health community to provide appropriate end of life care. Training and awareness in processes of high quality care such as clinical observation, medication safety and infection control.

Effects: Hospital standardized mortality ratios fell significantly in the 3 years following the start of the programme from 94.6 (95% confidence interval 89.4, 99.9) in 2001 to 77.5 (95% CI 73.1, 82.1) in 2005. This translates as 905 fewer hospital deaths than expected during the period 2002-2005.

Lessons learnt: Improving the safety of hospital care and reducing hospital deaths provides a clear and well supported goal from clinicians, managers and patients. Good leadership, good information, a quality improvement strategy based on good local evidence and a community-wide approach may be effective in improving the quality of processes of care sufficiently to reduce hospital mortality." (24)

Mike English Et Al

"There is increasing focus on the strength of primary health care systems in low and middle-income countries (LMIC). There are important roles for higher quality district hospital care within these systems. These hospitals are also sources of information of considerable importance to health systems, but this role, as with the wider roles of district hospitals, has been neglected. As we make efforts to develop higher quality health systems in LMIC we highlight the critical importance of district hospitals focusing here on how data on hospital mortality offers value: i) in understanding disease burden; ii) as part of surveillance and impact monitoring; iii) as an entry point to exploring system failures; and iv) as a lens to examine variability in health system performance and possibly as a measure of health system quality in its own right. However, attention needs paying to improving data quality by addressing reporting gaps and cause of death reporting. Ideally enabling the collection of basic, standardized patient level data might support at least simple case-mix and case-severity adjustment helping us understand variation. Better mortality data could support impact evaluation, benchmarking, exploration of links between health system inputs and outcomes and critical scrutiny of geographic variation in quality and outcomes of care. Improved hospital information is a neglected but broadly valuable public good. Accurate, complete and timely hospital mortality reporting is a key attribute of a functioning health system. It can support countries' efforts to transition to higher quality health systems in LMIC enabling national and local advocacy, accountability and action."(25)

Jean-Michel Yeguiayan Et Al

"Severe blunt trauma is a leading cause of premature death and handicap. However, the benefit for the patient of pre-hospital management by emergency physicians remains controversial because it may delay admission to hospital. This study aimed to compare the impact of medical pre-hospital management performed by SMUR (Service Mobile d' Urgences et de Ré animation) with non-medical pre-hospital management provided by fire brigades (non-SMUR) on 30-day mortality.

The FIRST (French Intensive care Recorded in Severe Trauma) study is a multicenter cohort study on consecutive patients with severe blunt trauma requiring admission to university hospital intensive care units within the first 72 hours. Initial clinical status, pre-hospital life-sustaining treatments and Injury Severity Scores (ISS) were recorded. The main endpoint was 30-day mortality.

Among 2,703 patients, 2,513 received medical pre-hospital management from SMUR, and 190 received basic pre-hospital management provided by fire brigades. SMUR patients presented a poorer initial clinical status and higher ISS and were admitted to hospital after a longer delay than non-SMUR patients. The crude 30-day mortality rate was comparable for SMUR and non-SMUR patients (17% and 15% respectively; P = 0.61). After adjustment for initial clinical status and ISS, SMUR care significantly reduced the risk of 30-day mortality (odds ratio (OR): 0.55, 95% CI: 0.32 to 0.94, P = 0.03). Further adjustments for the

delay to hospital admission only marginally affected these results.

This study suggests that SMUR management is associated with a significant reduction in 30-day mortality. The role of careful medical assessment and intensive pre-hospital life-sustaining treatments needs to be assessed in further studies" (26).

According article pharmaceutical care and toxicology "Poisoning is a rare event often, but in some cases whit critical consequences and so the right diagnosis and therapy is a golden end point. The toxicology medical equip must be multi-professional. Observing the results of bibliography citied in this works and some university toxicology programs for pharmacists when observe that the clinical pharmacist presence in stabile way in toxicologist medical team give improving in clinical outcomes.

Antidotes are used not often but rarely, and physicians need rapid information also in medicinal chemistry and toxicology field. The management of the systems must involve clinical and logistic pharmacist. The pathology, toxicology, pharmacology and medicinal chemistry competence of clinical pharmacist added to the emergency and ICU physician's competences can be the right keywords. The skills requested to the clinical pharmacist in order to works in efficiently way in toxicological medical team are: pro activity, learn about error, critical thinking, collaborative, approach, management ability, problem solving risk management (therapy errors management, some example and causes. illegible handwriting), we think that in order to have a more and efficacy inclusion of clinical pharmacist in the toxicologist equip also psychological and behavior specific skill are useful instruments .

New instruments as professional social media can give more opportunity to meet researcher in healthcare field. , Instrument to rapid share the information between healthcare professionals and to transfer research activities to practical settings. (27)

And in article New ICT Technologies to Improve Clinical Outcome in Toxicology and Poisoning. Open Acc J of Toxicol. 2017 "We strongly ask to international organization involved in hospital standard accreditations requirement to introduce as relevant instrument a informatics management system (cabinet informative or other systems) in logistics of antidothes. This will make possible a correct management and to have available the right antidothes in right time for the safety of the poisoned patients and also for professionals.

As we have seen in example for emergency drug hospital systems we can have also a reduction in total costs providing an efficiency system. (Almost 53.000 euro in 5 years in an Italian public hospital) we can think in example to total cost avoided if introduced in many national hospital. This kind of experience can be usefully translated to antidotes and toxicology filed in many hospital places. This modify in routine can reduce mortality rate due by due by incorrect antidotes stokes logistics improving also the clinical outcomes related. In example we can see that in different hospital also the stokes and availability in some classic antidotes as activated charcoal can be insufficient and related the cyanide antidothes we have see that this is not correctly available in the different world hospital situation related to the difficulty of industries or other condition that contribute to the variability in the request). Also the logistics of rare antidothes is a crucial process (the expiration time control and ordering procedure of this molecules can be part of an inefficient systems if not adequately controlled). We can also see that a velocity management ICT strategy can gives improving in the efficacy of process related to logistics and to translate rapidly the relevant information in Poisoning situations.

In our conclusion adding the ICT power and the clinical pharmaceutical care competences and knowledge added to the toxicological medial team we can have more clinical results, Reducing mortality rate and healthcare costs (28) in article Rethinking the Hospital Pharmacist Service: Centralized Logistics– Ict Systems and Clinical Pharmaceutical Care002 Strategies as a Management Opportunity for Public and Private Institutions is possible to verify that : "In last year's healthcare costs are increased constantly in logarithmic way and this conditions need an high efficiently resource management system more than past. Drugs, medical devices, diagnostics or medical errors are relevant voice in the public and private hospital current budget and healthcare Institution and government tray every day to control it. (U.S. HEALTH national expenditure amounted total 3.0 -3billion U.S. D.

The total spending on medicine in the USA was about 6 more than 400 us dollars in 2015).An

high performance HEALTHCARE org. Need today: deep innovations, right management of materials (LOGISTICS drugs and medical devices use), new technologies knowledge, risk management skills and other resource."(29) And in article : "Attitudes and Skills in Business Working Settings: A HR Management Tool" "This study move from the necessity to cover the need by professionals and public or private organization to reduce the high costs involved in some inefficient performances level. Today more than past working settings are very complex (also due by to days company competitiveness needs, cultural differences of workers, different educational and university course, personal goal setting, personal attitudes and other relevant aspect). High costs are involved in not efficiently in human resource management or by not rapid introduction of the new UR the new staffs. The total cost of human resource can be reduced of about 30% using a correct management strategic planning in order to obtain a more rapid and efficient introduction in the working places. Rationalize it is a golden endpoint as well as a real competitive advantages for the same company and organizations and instrument to well-being for the same professionals. The cost due by inadequate behavior or psychological profile and HR Management is crucial instrument of company competition.

Observing the new kind of works in example in ICT technology, social networks and other market we can see that the creativity and workers wellness are successful tools to differentiating Technologies Products by different producers giving improvement of sales volume. (Old and new economy differs also by the different concept of works: in new economy we can have less strictly working condition but more results oriented. Less hierarchic control vs. old economy industry). The aim of this work is to observe the actual situation of education in field of emotional intelligence field and then to give some instruments that can be used by professionals in the different working settings in order to have a good and rapid introduction and to obtain improvement also in global performances. (Instruments for well-being for the same professionals: Stressing working conditions easy gives also stress in private life.) Today more than past working activities are under great competition and rapid change (according to the company competitive needs), less defined and with more fluid roles , the working time in office/or out of office can change a lot, more new technologies available then past, more functional organizations towards hierarchy roles. All this new condition creates a hard environment (more than past results oriented).

So the organization researches the best professionalism available (with right HR management skills, Hig E.I. LEVEL, high behavior and psychological resilience ability and other skills useful for today jungle). So there is a great need to reduce the gap represented by behavior and psychological skills level required by company and the level of the professionals obtained in their educational life (schools, university, post university course). to be in condition to obtain high performances since first working experiences. Everyone can see that many professionals start their professional activity without a minimal level of emotional or social intelligence skills. Training systems and coaching can help but are needed deep knowledge in human resource management, and practical application.

In the working places today there is the need to have great skills in communications, conflict management, and pro activity, resilience, learning by errors, perseverance, critical thinking and much other discipline. Psychological attitudes and skills can influence the working performance level. In example is known that often negative thinking attitude (tunnel thinking) can create in mind preferential ways easy to be run and this can create problems in the management of their thinking process with low performances level. (Some mindfulness strategy can help to improve Psychological attitudes and reducing negative stress). The same thinking in the present time (observing too much the past gives trouble thinking while thinking too much the future can gives anxiety) help the mind can reinforce itself. Creativity can reduce anxious attitudes. About 70% of works ability and success depends on emotional intelligence versus 30 % technical abilities (Remember Pareto paradigm 20/80 similar). The emotional intelligence theory shows that the emotional brain can be more rapid in responding to some stress stimulus then the rational thinking. For example studies showed that Amygdala physio-pathology is involved in E. I. management and can give in this situation rapid response without waiting for the cortical brain control. (neo-cortex / reptilian brain) .

When in the same time many strong emotions stimulation arrives too fast to amygdala the neo

cortex is not involved. An easy reactive amygdala can results in working difficulties in relationship in equip. Low level of social intelligence gives isolation and depression and low working performances. Conflict are natural in all context and so in working setting. The self-motivation is strongly involved in professional development. Successful status is related with high emotional, social and political attitudes. But even if the technical competences are subjects of usual educational and university policy we see a real gap for the emotional social and relational development in student curriculum. So in this work, we try to give some elements for improving behavior skills to be active and efficient part of a professional team or to prevent and resolve conflict. In our opinion some theory are to be post under right light: and for example: De Bono Seven hats and Lateral thinking (problem solving approach), E. Goldratt TOC Theory of constraints, about psychological limits (a management theory), translational analysis, emotional and social intelligence, Pareto paradigm, GANTT diagram, Eisenhower matrix, Deming cycle (total quality management), MASLOV hierarchy of need, but they only the first of many other."(30)

Jacobsen DETAL

"Antidotes may play an important role in the treatment of poisoning. For many physicians and toxicologists an antidote is an antidote. According to the IPCS definition, an antidote is a therapeutic substance used to counteract the toxic action(s) of a specified xenobiotic. Given this wide definition, the efficacy of an antidote may vary considerably depending on which toxic action(s) is/are being counteracted and on the level of counteracting power: An almost 100% efficacy is seen using specific antagonists, such as naloxone in opiate poisoning or flumazenil in benzodiazepine poisoning, e.g. resulting in complete reversal of opiate toxicity unless complications, such as anoxic brain damage, have developed. At the other end of the efficacy scale, we may place chelating agents for heavy metal poisoning and diazepam for organophosphorus insecticide poisoning. Therefore, in the IPCS/EC evaluation series of antidotes, some chelating agents are considered only to be an adjunct to supportive care which is the cornerstone of treatment. When teaching clinical toxicology or recommending the use of antidotes in poisoned patients, the expected efficacy level of the antidote in question should be stressed. This may be particularly important in severe poisonings when the antidote may only be considered as an adjunct to supportive care, e.g. deferoxamine in acute iron poisoning. Unless this is stressed, the un experienced physician may rely too much on the antidote and may not pay sufficient attention to the supportive care. In this presentation, the varying efficacy levels of antidotes are discussed as based on the presently ongoing IPCS/EC evaluation programme on antidotes. "(31) In publication : Emergency Pharmaceutical Care in ED and ICU: Toxicology, Infectious Disease, Life Saving Drugs Management, Pharma co economy as Synergic Knowledge Instrument to Reduce Mortality Rate and Healthcare Cost 2019 "If in emergency medicine time is universally considered "TIME ISBRAIN" in stroke management (and the golden hour) the pharmacist clinical competencies is a fundamental fact for patient safety in the medical team (in example for administration of anti bioticsin sepsis , thrombolythic therapy, antidotes administration and other) . The clinical pharmacist competencies related intensive care drugs, pharmacology, toxicology, medicinal chemistry, medical devices, infectious disease, cardiovascular, renal, epatic, neurology Bone marrow, pulmonary functions and many other in example TDM therapeutic drug monitoring Medicine lab competencies, Pharma co economy are currently present in curricula studio rum of many clinical pharmacy International course. So Is clear that the clinical pharmacist and pharmaceutical care skills can be the right instrument to reduce mortality rate and cost containment. The same the economic results of this approach is a clear undeniable fact. The Clinical Pharmacist Interest is mainly on Some Drugs Classes Management in EM or ICU:

Like

- Antidotes (A and B priority)
- Hemo-derivates
- Some parenteral antimicrobials
- Anahestetics, Miorelaxants, analgesics and narcotics
- Cardio active
- Electrolites
- Anti pertensive , diuretics
- Anti epileptics

And Other necessary Emergency drugs to cover the various emergency need (compoundings, magistral formula) and few other classes."(32) and in a ICU setting "Observing the results of the bio medical literature reported in this work we can say that the clinical pharmacist presence

in stabile way in ICU medical team gives improving in some clinical patient's outcomes and reducing mortality rate. This conclusion is related to the complexity of ICU SETTINGS and by critical patient's condition. To adequately managed this situations are needed the most complete medical equips (multi disciplinariety). We observe that the role played by hospital pharmacists can be in more clinical activities, as educator (towards all healthcare professionals), researcher, and manager functions." (33) Results of a practical experience: Location PC area 29121Setting public provincial hospital Time of observation: 2008-2018 Position observed: hospital pharmacist manager (applied pharmacologist) involved in antidothes management provincial stokes. Hospital pharmacist manager whit tqm total quality management course. (uni one industrial to 1996). Way of execution: under a pharmaceutical and managerial approach

Results: during this periods of time no event related to lack of availability in antidothes stokes that causes relevant or letal patient damages. (no notification from official hospital office). only few times needed to get some antidothes molecules (from other hospital or poison centre or from regional hub for antidothes to treat patients but with out any clinical complications). Every year was respected budget related antidothes. (This result was obtained WITH the CRR regional antidothes centre and CAV PV collaboration). The antidothes hospital stokes in PC area are present in emergency department, ICU, pharmacy And Blood bank .Great collaboration between medical equip of emergency department, ICU, hospital pharmacy regional hub, poison centre contacted.

DISCUSSION

Every level of healthcare managers (high, but also lower) MUS use manager instruments to adequately perform high risk job. Many managerial theory or tools are efficacy applied in many settings with high results as Outcomes. Related this real efficacy documented is crucial to transfer this methods also I health care setting and Also in toxicological medical team (poisoning and other) to get the best clinical and economical results and for the safe of patient life involved.

Many serious condition like severe poisoning, rare poisoning, multiple cases, disaster, terroristic attack, nuclear incident and other need complex and rapid response and the organization added to the healthcare professionals make the difference." Related the result presented of a practical experice is possible to say that a strictly observance of antidothes normative rules added to a specific managerial competence of hospital pharmacist make possible an adequate performance towards patients safety in a very dangerous setting like toxicology and poisoning. Hospital pharmacist managers with high competencies also in TQM make possible to be Facilitator between toxicology medical team, HUB regional antidothes centre CRR RER, central medical office, national stockpile of antidotes , ministerial of health office ,polices forces , inside ministry office pharmaceutical industries, import company of drugs and all other member involved in this kind of process.

CONCLUSION

Related the result of this bibliographic research, the practical experience presented and all the current Managerial instruments and theories is undeniable that this last tools must be deeply introduced and applied in toxicological setting to obtain the best possible clinical results in cases of severe or complex poisoning. The right flux of relevant information about poisoned patients or related antidothes characteristic provided by poison center make possible to achieve the best clinical result possible. The result presented in this work was obtained using: ICT instruments, managerial strategy, clinical pharmacist competencies, HR management, risk management and other techniques we have see.

Under the light of this practical experience and literature presents is crucial to ask to International org. involved in hospital accreditation and other public institution (ministry of health, universities and other) to deeply introduce managerial concepts and skills in all component of medical team involved in severe poisoning to achieve the best result available. in order to setting the best strategy in poisoning and toxicology field is strongly requested deeply knowledge related the toxic mavens and related to the antidothes and supportive or depurative strategy or laboratoristic competencies but also high healthcare professionals managerial training. If "time is life" in some medical emergencies the same is possible to consider that and adeguate management of all component of toxicological team from the access to ED to the discharge of a poisoned patient is a fundamental basis to the best therapeutic strategy.

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