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Is Not Only to Recognize "Errare Humanum est" (To Err is Human), Instead We Must Promote for Patient Safety "Meliorare Humanum est, Supra Collaboratio Maximi Momenti" (Improve is Human, Better Working as a Team)

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Abstract

Based in the patient safety we need to move the idea from Errare humanum est perseverare diabolucum (to err is human, but to persist is diabolical) as statement where the error is not recognized to opportunity to improve. Could be exist the learning in the medicine field without objective feedback? How we learn from the senior physicians without the critical thinking and further reference of the Lex Artis (Law of the skill, the rules that regulate a professional duty)?

Traditionally the medical education is based in artisan formation related from the mentor or the guilds; the perspective to reach competences more than the biological and clinical knowledge need move to collaborative learning, leadership, followership, empowerment and critical thinking process. The main competence to develop in the attention of acute patient must be empathy and the leadership must be the finest level of the performance based in responsibility and confidence without fear for the approval form the senior staff. The competence and the incompetence are close related with the humility is wise to put to a side the ego, anxiety, stress, excess of confidence, hurry and frustration instead the objective improvement challenge in adults.

In this article describes instead the dictum Errare Humanum Est (maxim: To err is human) to believe is better to believe the medical student is able to improve always and needs confidence and endorsement to promote the learning based in a respectfully relation. Then meliorare humanum est supra collaboratio maximi momenti (Improve is human, better working as a team) is the new phrase to use and spread to promote a culture of teamwork.

Keywords: *Pediatric Simulation; Simulation; Acute Pediatric Patient; Emergency; Guatemala; Mortality; Errare Humanun Est Perseverare Diabolicum; Primum Non Nocere (First Do Not Harm); Errare Humanum Est (Err is Human)*

Once we analyze and understand that the familiar dictum Primum non nocere (First do not harm) is not enough, the next question should be: What can we do to complete this primary thought? [1].

For addressing this issue, we need to accept that every human can make a mistake, of course good preparation and knowledge reduces this possibility, but it remains. Despite all efforts for being prepared and cumulate tons of wisdom, error is always the permanent ghost.

The education is based more in knowledge than performance, in several countries until remain to be static, related with the history, fragmented, in parts, about diseases, over the corps, by trial and error, reductionist and the progress and responsibility based in hierarchy.

The hierarchy is related with power and economic relations such that the knowledge is an economic good; where the privileges are related with family wealth and how the artisan or guilds formation are related form the ancient ages. The recognition of the opportunity to be a physician in the ancient cultures is related with well renowned families. Since that view the master choose the student and is a mutual relation based in several years sharing the learning time until the competences is accepted in performance for the master.

The Middle Age and the Renaissance move to scientific approach to appreciate and understand the concrete reality and how reproduce that over the cognitive competences over only the experience.

Is Human the error? How manage the ominous human error? Is common and spread the concept that "Errare humanum est perseverare diabolicum" ("to err is human, but to persist is diabolical") is related with the individual learning and punishment. The trial-error learning has been over an amount of the experience over the patient. It describes in worst for the patient the phrase if the person persevere in the error could be considered in perverse performance [2,3].

Could be an increase in competences and performance without have mistakes? Is the learning pathway perfect with any pitfall? The learning is not only about knowledge, is related with attitudes and skills. But how we can introduce in the medical education the opportunity to reduce the medical error and use from the experience the recognition and the improvement of the competences? If competency in the medical freshmen is required to recognize incompetence, truly incompetent medical students will be both incompetent and unaware of their incompetence. Be ashamed, punished or have the failure to recognize incompetence among the incompetent—often referred to as the Dunning-Kruger effect-has far-reaching implications because, presumably, one of the prerequisites of voluntary self-improvement is actually recognizing the need for improvement. This point could be with ethical issued that we need share with the medical students to have the humility to recognize the opportunity of the error [4].

Ok, err is human, but why considerate persevere in the error is diabolicum or evil? We discuss based in the patient safety and that primum non nocere (First: do not harm) is not enough; is necessary to make the Lex Artis (Law of the skill, the rules that regulate a professional duty) to assure the welfare of the patient. The perseverare diabolicum is related to have a judgement and punishment with lack of confidence to learn from the senior model.

Is most related with the Middle Age the influence of the very old and straight traditions in Medicine and Health Care training. For years it has been though that hierarchy and seniority experience are the clue for the excellence in medical attention. A senior taking decisions and giving commands without any possibility for challenging his opinion has been the rule for many years in the Health Education environment. This type of "education" is, as we can realize, full of error. This error is related with lack of confidence and maybe was blame and embarrassed for the teacher or senior but over these bad feelings the student does not receive an objective feedback.

The hospitals have evolution from the ancient ages; more of that related by the influence form the war episodes. We can make an equivalent between medical services and generations of warfare. Even in the medical formation is moved from the 1st Generation Warfare when the army is based in tightly ordered soldiers with top-down discipline. The decision making was none, the troops would fight in close order and advance slowly based in hierarchy. The battle is based in suicidal face to face combat using bow and arrow/sword and generated injuries before the antibiotic era and ambulance service. Until the Crimea War in 1855 when Florence Nightingale reproduces the results of hand washing in the patient attention. Until that war the lessons from Ignaz Semmelweis and the ambulance first concept in Napoleonic wars. The "Lady with the Lamp" increase the work shift and share her light about performance of attention and knowledge; until today is not obsolete.

To the 2nd Generation Warfare and Hospitals (medical services) are considered in warfare in I World War, remember is a pre antibiotic era, and the industrial revolution moves the training from guilds and the familiar heritage of medical profession based in artisan education. In the industrial revolution the migration from rural places to the cities requires to reassign to the agriculture training to learn to operate machines. In this learning the number of casualties is high, and this movement produces machine guns and industrial ammunition. The number of casualties and deaths increase but the response capabilities were the same based in the long way to have decision making in the patients.

In the 3rd Generation Warfare and medical services are described since II World War and includes speed and initiative, the High Accuracy/Low Opportunity skills describes training in special forces and have the regular structure of well trained and stable teams. The Task Force will be a group with a specific objective and formation to develop a mission; the performance in the medical field moves to have a regular structure with high accuracy specialist. Unfortunately, the message that the well-trained specialist is the objective, promotes during the training and freshmen years the awareness and confidence could be related with the hierarchy. The legacy of MASH services in Korea and Vietnam wars transcend the response and the mobility to have better survival rate based in mobile teams as the other battalion in army. Since the introduction of the concept of Crew Resource Management concept in aviation industries and space flights promotes the training competences and the risk reduction as industry.

The 4th Generation Warfare and medical services need to have some of the next considerations based in complex and long-term incidents, non-national or transnational base, diffuse, sophisticated psychological warfare and propaganda, spread the notices in the media and is the case know in pandemic events, high risk such as Ebola virus or terrorism. When this happened need to several teams to response in different environment non static and complex scenarios. Then the training needs to be a permanent schedule to assure the competences and maintain the capabilities [5,6].

We cannot believe the learning neurology changes over the centuries; the education is changed over the centuries. The impact in the long term in the intergenerational effects of the war on the health in children is described; and even in a post conflict society such as Guatemala after internal conflict during almost 30 years needs to move to solve the difficulties and promotes the human development, and in the medical field the leadership and empowerment describes the most finest level of competence. To reach this level of performance one of the most powerful tools for reducing this is promote teamwork. The World Economic Forum identifies top skills to the jobs in the future; the medical services are not far to attend those and includes in the formation blueprint to be a competent professional. The skills described are close to be include in this list: complex problem solving, critical thinking, creativity, people management, coordinating with others, emotional intelligence, judgment and decision making, service orientation, negotiation and cognitive flexibility. As the complex systems the team is more as whole than the addition of single parts. The energy and the alignment of efforts move to logarithmic increase instead arithmetic increase [7,8].

There is a crucial need for moving to "Meliorare Humanum est, supra collaboratio maximi momenti" (Improve is human, better working as a team). During the last decade, teamwork has been addressed under the rationale of inter professional practice or collaboration, highlighted by the attributes of this practice such as: interdependence of professional actions, focus on user needs, negotiation between professionals, shared decision making, mutual respect and trust among professionals, and acknowledgment of the role and work of the different professional groups. Teamwork and interprofessional collaboration have been pointed out as strategy for effective organization of health care services as the complexity of healthcare requires integration of knowledge and practices from different professional groups. This integration has a qualitative dimension that can be identified through the experiences of health professionals and to the meaning they give to teamwork. The interprofessional education has a relevant role providing students with opportunities to learn about the roles and responsibilities of other professions and develop communication and teamwork skills [9].

There are key features identified as pivotal in teamwork such as: team member characteristics, common task, communication, cooperation, coordination, responsibility, participation, staff satisfaction, patient satisfaction, and efficiency.

Based on the general aspects described below, we can say that it is an urgency to teach to all our Health Care Professionals (Medical Doctors, nurses, therapists, pharmacist, nutrition, rehabilitation, amongst others) about teamwork.

Teamwork is not only about working together, teaming presents technical and interpersonal challenges: people must get up to speed quickly on new topics and learn to work with others from different functions, divisions, and cultures. For facing this, leaders can foster cross-boundary collaboration by emphasizing purpose, building psychological safety, and embracing failure and conflict. Individuals who learn to team well acquire knowledge, skills, and networks. Teaming helps organizations and individuals execute and learn at the same time [10,11].

Teambuilding and/or teamwork was first designed for business; as a tool for big companies for success; and just as simulation practice, all these strategic planning and business tools entered very recently in the medicine world. We could go to the basic 5 C´s of teamwork: Commitment, Contribution, Communication, Cooperation and Connection.

Commitment in medicine could be one of the most developed skills, almost every physician and health care practitioner is committed with one thing: not having errors. Unfortunately, most of the times is due to the wrong reason, it is due to fear; fear to be ridiculed, fear to your senior teachers, fear… always fear.

Commitment in medicine should be to the patients, to the one who suffers to cure the illness, to support the patients and their families, to cure the illness, to support the patients and their families. The word patient is not related with patience, etymological the word originally meant "one who suffers"; then the most important competence in acute patients will be the empathy; the finest level of the competence must be the leadership and the followership; is not only the capability to lead; is necessary to promote other to rise and shine and the opportunity to be a follower or the following to other colleagues in whom the leadership is promoted [12].

We have another C for Contribution. To contribute should be sharing something of value to your partners. To contribute is one of the most important actions for the inter professional practice. All health care professionals should be contributing with one common goal, the recovery of the patient. It is sad when such brilliant medical attendants start a quarrel for deciding who is right or who know more, instead of having a transversal contribution for the benefit of the ill.

Another C comes from Communication, every day in almost any hospital worldwide, only due to the lack of communication between health care professionals and with the patients. It is well described the relation with rude communication from the physician and the increase of medical complications. Communication need to be a part of the professional skills to give an objective instructions and feedback. We need to promote the welfare of the patients instead win a discussion or claim over our partner.

Cooperation and connection are the other C´s; at the end all of them interconnected, all the going to the same direction, patient wellness. These are not simple concepts. When we speak about capacity it is not only about science, it is about skills and the ability of decision making. To cooperate is to support others, to support your colleagues, without blocking. And finally connecting occurs when are the other C´s are solved. These concepts would be related with negotiation skills based in have win-win approach even with the patient. We need break the paternalism to have more honest and close relation with the patient with more confidence.

Maybe is another C necessary; we need to celebrate together, be sure that the Best Alternative to a Negotiated Agreement was discussed, endorsed, reached and receive as a team the feedback facing to the future with the learned lessons both positives and negatives. The critical thinking feed the discussion to analyze the decisions and as the quality assurance promotes have measurement of the results, and even the worse or the best performance always we can move to do better [13-15].

Until today we believe as the Ancient Sacred Mayan Book called Popol Vuh says: no one left behind, we will reach the greatness until there is the man trained [16].

Conclusion

In the artificial intelligence era; we need believe and promote the humans. If the err is human as the improvement is; instead promote the not accurate idea to persevere in the error is devil maybe is because is charged as individual learning. Difference from the machine learning as planned, the human learning requires confidence, respect, endorsement and humility to develop the competence to recognize the incompetence.

The teamwork is the better option to promote the collaborative learning and improve for the patient safety based in have the skills to learning from the performance of the Lex Artis and such is the case common in peers the delays, pitfalls, skip or gaps.

Where the teamwork is used in medical training efforts will be reduced and results will be improved exponential. Improvement is human and better if teamwork is done; Meliorare humanum est, supra collaboration maximi momenti (Improve is human, better working as a team) realize that the competences also includes be emphatic, we can learn the leadership but is hard to teach it, is based in a model from the mentor the leadership and the followership. The team is more as whole than the addition of individuals.

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