

The First European Conference on Diagnostic Errors – a new wave of proficiency and efficacy in medicine

Prima Conferință europeană privind Erorile de diagnostic – un nou val de competență și eficacitate în medicină

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Abstract

The First European Conference on diagnostic errors took place in Rotterdam in June 29th – July 1st 2016 managed to bring together 124 healthcare professionals from 16 countries, and brought diagnostic errors into discussion for the first time in Europe. Research shows that diagnostic error represents the third cause of mortality in the U.S. being considered a cumulus of health systems failures, lack of knowledge of medical personnel, tremendous pressure of the demand for continuous research and publishing, failures in communication between healthcare professionals, and underfunding of medicine. The topics were variate, centred on ways to detect and measure diagnostic errors, psychology of the diagnostic process, factors that influence physicians, and the need for accurate medical tests. Romania was honorably represented by an original paper of the undersigned, coordinated by Prof. Traian Mihăescu and 4 clinical vignettes.
Keywords: diagnostic errors, medical error, avoidable medical harm, improvement of diagnostic

Rezumat

Prima conferință europeană dedicată erorilor de diagnostic, care a avut loc la Rotterdam în perioada 29 iunie – 01 Iulie 2016, a reușit să reunească 124 de profesioniști din domeniul sănătății din 16 țări, aducând în discuție, pentru prima oară în Europa, problematica erorilor de diagnostic. Se crede că erorile de diagnostic reprezintă a treia cauză de mortalitate în Statele Unite, fiind considerate un cumul al derapajelor sistemelor sanitare, pornind de la lacunele personalului sanitar și încheind cu imensa presiune a publicării continue de cercetare medicală, dificultățile în comunicarea dintre profesioniști și subfinanțarea sistemului sanitar. Temele abordate au fost variate, centrate atât pe modalitățile de măsurare a erorilor de diagnostic dar și pe psihologia stabilirii diagnosticului, factorii care influențează medicul în procesul decizional și nevoia de acuratețe a testelor medicale. România a fost reprezentată cu o lucrare originală a subsemnatului, sub coordonarea prof. Traian Mihăescu și 4 vignete clinice.
Cuvinte-cheie: erori de diagnostic, erori medicale, morbiditate evitabilă, vătămare neintenționată, îmbunătățirea diagnosticului

When traveling to a foreign country, where language, spelling and traditions are totally alien to Latin natives, such as The Netherlands, one struggles to quickly find commonality and cling to every seemingly insignificant similarity in order to lessen the anxiety of strangeness. Fortunately, as healthcare professionals, we had no problem blending into the First European Conference on Diagnostic Errors that took place in late June, in the futuristic, yet unbelievably homelike, city of Rotterdam.

Medical errors (mostly derived from diagnostic error) have rapidly come to the attention of the medical community as health systems throughout the world, in an attempt to organize in order to provide a safer environment for patients, recognize that medical error has become the third leading cause of mortality in the US. (Makary & Daniel, 2016) The preoccupation on diagnostic error is a relatively new topic in the medical world, even though the international literature is not devoid of studies on the subject; Romanian literature has at least three publications on errors of clinical reasoning and diagnosis that are over 40 years old. (Bungeteanu & Buzescu, 1960) (Fronescu, 1970) (Oproiu, 1971). It is safe to say that the fuse has been ignited with the international break-point publishing in 1999 of the ravishing report from the Institute of Medicine's Committee on Quality of Healthcare In America: *To Err is Human*. (Kohn, Corrigan, &

Donaldson). In this report, the authors stated that roughly 1 in 10 patients is harmed by medical error in the US and almost 98,000 patients die in U.S. hospitals every year due to medical errors. There are many key factors that influence the medical error, but aside from the poor judgement and lack of proficiency, the continuous clinical research, ongoing revision of guidelines, and the accelerated publishing of new medical knowledge are overwhelming the physicians in their attempt to optimize the diagnosis and treatment process. (Zilberberg, 2011).

Organized by Dr. Laura Zwaag – a young psychologist researcher in the field of diagnostic error and co-chaired by Dr. Georgios Lyratzopoulos, also a known figure in the field, the First European Conference on Diagnostic Error developed great topics from researchers all over Europe, Asia and America, with 124 participants from 16 countries. Held under the auspices of the Society to Improve Diagnostic in Medicine (SIDM) and honoured by the presence of its founder – Dr. Mark L. Graber, the Conference begun with a short presentation from Dr. Graber on a clear definition of diagnostic error, the expectations from the medical graduates and the sad statistical fact: "it is likely that most of us will experience at least one diagnostic error in our lifetime". Dr. Graber concluded this presentation optimistically, affirming that "improving diagnostic process is not only possible, but

it also represents a moral, professional, and public health imperative”.

Later on, Dr. Cordula Wagner presented a paper on “Patient Safety in the Netherlands: Adverse Events, Preventable Deaths and Diagnostic Errors” based on health records and previous studies, showing that the lack of knowledge or inability to apply existing knowledge leads to most medical errors.

An insightful presentation on contexts that influence diagnostic accuracy, held by Dr. Henk G. Schmidt, Professor of Psychology at Institute of Medical Education Research Rotterdam, showed that doctors, although believed to base their diagnostic approach solely on their medical knowledge, are influenced by 3 factors: contextual (time pressure, contradictory information provided by colleagues), patient characteristics and self-related (previous traumatic experiences). This insight adds a new perspective on the complicated mind of a physician – who is subject to exhaust, stress, and media pressure.

Also, panel discussions and sessions on clinical reasoning and solutions to diagnostic errors filled the first day, concluding that diagnostic errors lead to avoidable harm of the patient, and the acknowledgment of the fact that these errors are rapidly becoming a leading cause of death worldwide.

As a separate topic, clinical laboratory tests issue were discussed. Dr. Patrick Bossuyt, Professor of Clinical Epidemiology at the University of Amsterdam, showed that even though health care professionals rely on medical tests to support diagnostic judgment and clinical decision making, the medical tests themselves should be properly evaluated before they are introduced into clinical practice, paying attention to the validity and the real outcome of the clinical tests. Another take-home message was that we shouldn't rely on too many tests, or order all available tests, in an attempt to make a more accurate diagnosis; this behavior increases the probability of sinking into too many details and missing the real problem.

An interesting session brought together a young clinician (Dr. Takashi Watari from Shimane University in Japan) alongside an experienced diagnostician (Prof. Francesco Mattace Raso, Department Internal Medicine, Erasmus MC, Rotterdam), the former presented a clinical case and then they both separately reasoned to find the correct diagnostic. This exercise demonstrated that clinical experience alone is not enough to find the correct diagnostic, but it also showed that the fast and sustained collaboration with fellow clinicians and laboratory experts increases the probability of success in patient diagnosis and treatment.

Towards the end of the conference, Dr. Hardeep Singh, a well-known figure in the domain of improving diagnostic error, presented his work entitled “Diagnostic Errors & Electronic Health Records: Turning Grand Challenges into Opportunities”. Dr. Singh accurately pointed out that health-care systems and records throughout the world are currently failing in assisting the clinician in diagnostic reasoning, as they are unfriendly to read and process and are subject to faulty recording. He then underlined that there is a clear need to find appropriate frameworks to approach the study of medical records in order to provide clear data and in an ongoing effort to decrease the incidence of diagnostic errors.

Romania was well represented by the undersigned and young pulmonology resident Dr. Diana Costache under the coordination of Prof. Traian Mihăescu, presenting a short oral pitch and five posters: 4 clinical vignettes on diagnostic errors from clinical practice and one regarding healthcare improvement science entitled: *Healthcare improvement science: Can we provide more insight and better educate healthcare professionals?*

Our work was well received by the audience and our presence was warmly welcomed by the organizers who found our preoccupation on diagnostic errors a sign of academic maturity and a step forward in representing our ongoing and ever-changing medical environment.

In conclusion, it is safe to say that we are rapidly approaching a new perspective in which we will perceive the diagnostic process. We must find clearness and accuracy to filter all the medical research and appeal more, not to our inner-self specialist, but to the surrounding fellow experts and spend more time with the patient's story, in this medical environment that we can safely call *Medicine 2.0*.

You can learn more about the detailed Conference program, speakers' bios and more by scanning the following QR code (Figure 1). ■

References

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Figure 1. The QR Code leading to conference website



Figure 2. Rotterdam skyline and Erasmus Bridge.