LACK OF EXPERIENCE IS A REAL DANGER IN THE DIAGNOSTIC PROCESS

:: BIMAL JAIN

Abstract

A failure to suspect a disease with an atypical presentation and formulate it as a hypothesis is not due to heuristic of representativeness as proposed by Balzaretti but is due to lack of awareness of atypical presentations of a disease due to lack of experience. Thus, lack of experience is a real danger in the diagnostic process.

Dear Editor,

I do not agree with several comments made by Balzaretti (Representativeness heuristic is a potential danger to the diagnostic process. The Reasoner. 19(1). https://doi.org/10.54103/1757-0522/27372) about my article (Jain BP. 2024. Role of heuristics in diagnostic reasoning in practice. The Reasoner. 18(4): 32). First of all, his comment that diagnostic reason-

ing is similar to ordinary, everyday reasoning is wrong. Diagnostic reasoning, like all scientific reasoning, is well-known to be a process of hypothesis generation and testing (Jain BP. The scientific nature of diagnosis. Diagnosis 4 (1):17-19. doi: 10.1515/dx-2016-0032), which is lacking in everyday reasoning. The role of heuristic of representativeness in diagnostic reasoning, as I mention in my article, is to make us suspect a disease from a presentation and formulate it as a hypothesis, which is then tested and diagnosed (or not) after testing. In everyday reasoning, on the other hand, this heuristic leads to a probability judgment directly from available information without any hypothesis generation and testing, that is usually erroneous, as we see in the engineer-lawyer experiment (Jain BP. 2024: 32). Secondly, Balzaretti argues this heuristic prevents us from suspecting a disease with an atypical presentation by citing example of a 70 year old woman in whom aortic dissection was not suspected, due to its atypical presentation. I believe it was not suspected due to this heuristic but due to lack of awareness of wide range of presentations of aortic dissection including those that are atypical, due to lack of experience. We find experienced physicians to routinely suspect diseases with atypical presentations and diagnose them accurately after testing , in scores of published diagnostic exercises about real patients such as in clinical-pathologic conferences (CPCs) and in clinical problem-solving exercises (Jain BP. An investigation into method of diagnosis in clinicopathologic conferences (CPCs). Diagnosis 3 (2) https://doi: 10-1515/dx-2015-0034; Jain BP. Why is diagnosis not probabilistic in clinical-pathologic conferences (CPCs): Point. Diagnosis. https://doi.org/10.1515 dx-2016-0012). In one such exercise, for example, acute myocardial infarction is suspected and diagnosed accurately after testing in a healthy 40 year old woman with highly

uncharacteristic chest pain in whom its presentation is atypical (Pauker SG et al. How sure is sure enough? N Engl J Med. https://doi.org/10.1056/NEJM199203053261007).

In conclusion, it is not heuristic of representativeness, but lack of awareness of atypical presentations of a disease due to lack of experience, which leads to failure to suspect a disease with an atypical presentation. Therefore, it is not this heuristic, but lack of experience, which is not only a potential, but a real danger in the diagnostic process.

BIMAL JAIN, M.D iD
Mass General Brigham/Salem Hospital