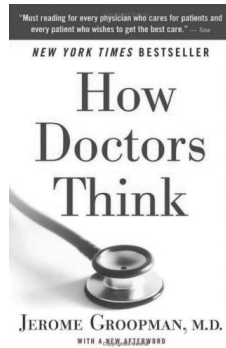


BOOK REVIEW



Book Review by Chenjie Xia,
McGill University,
 by Dr. Jerome Groopman

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In his latest book, *How Doctors Think*, Dr. Groopman, a haematologist affiliated with Harvard Medical School, takes the readers on a tour of a wide range of medical fields while jumping swiftly back-and-forth between the physician and the patient's perspective. Most chapters open with the story of an individual patient and his doctor, whose interactions introduce us to an aspect of problem-solving in medicine. The author then further expands upon the subject in an essay form by weaving into the story-telling opinions from experts of cognitive thinking in medicine as well as evidence from recent research work on the topic. The stories, although slightly melodramatic at times with their predictable climax followed by a happily-ever-after resolution, do provide an accurate and helpful glimpse of the complex infrastructures of health care to those unfamiliar with the field. Dr. Groopman possesses a quite impressive ability for stripping medical facts of their jargon and rendering them accessible to laymen. Each story directs his lens onto particular "cognitive errors" in the practice of medicine, a term he uses to describe flaws in the thinking of physicians that result in misdiagnosis and/or mismanagement of illnesses. Then, deftly alternating the focus between the analysis and the story, he intertwines theory and practice to demonstrate how these mental traps can be averted.

A common belief among the general public, fuelled by popular entertainment media, unreservedly equates advanced technology with better medical care. Although health care providers attempt to show a bit more discernment toward the magnetic attraction of technology, we nevertheless find ourselves engulfed by this tornado of armamentarium that allows us to see deeper and smaller into the human body. Certainly, new technology is not portent of the downfall of medicine, on the contrary. But Dr. Groopman guards us against the looming danger of relegating to the back row the

time-old skills of speaking and listening to the patient in favour of simply relying on faster and easier tests in making a diagnosis. Example after example, he highlights the risk of overlooking important subtleties, nuances and ambiguities in a patient's illness if we are not tuned in to their speech, their body language, their personal background. In a similar argument, he calls upon our caution in facing the increasingly influential presence of algorithms and guidelines in clinical practice. He asserts that these recipe-like approaches lead to cognitive errors in hindering creativity and flexibility of our thinking. He concedes that medicine is dominated by uncertainty and practiced with trial-and-error, and it is thus by no hazard that an atmosphere of conformity in medical practice is required to provide a certain structure. However, he urges us to never become passive followers of orthodoxy, to always challenge the rigor and validity of what we are taught and what we believe to be the truth. To those who assert doctors will no longer be needed with the increasing widespread access to information and the technological advancement of diagnosis and treatment modalities, *How Doctors Think* provides a resounding counterargument to their preposterous claim.

Through his vivid story-telling, where individual doctors, the pediatrician, the endocrinologist, the plastic surgeon or the radiologist, come to life each with their own distinct personality and emotional profile, Dr. Groopman reminds us that the most neglected and thus most threatening source of cognitive error is the physician himself. As fallible individuals, our own past experiences and current state of mind can greatly colour and sometimes cloud our judgement. For example, faced with a "difficult" patient who is failing treatment for a chronic illness because of non-compliance to medication, many physicians will feel annoyed or perhaps even disgusted. Dr. Groopman asserts that these are quite natural reactions from a physician; it would be ludicrous to demand complete emotional detachment from physicians, who are also human beings. The danger lies not within the existence of these emotions per se, but rather with the ignoring of them as potential sources of cognitive errors. He further argues that because each physician's particular temperament precludes him from being compatible with all types of patients, when choosing a physician, one should always keep in mind that a "good doctor" for your neighbour might not turn out to be a "good doctor" for you.

This book primarily targets the general public, but it is

also of tremendous value to medical practitioners of all levels, especially for those on the giving and receiving ends of medical education. For example, we are taught as beginner medical students to pose diagnoses through a step-wise, logical approach. However, shortcuts and pattern recognition easily find their way into our daily work with patients, most often subconsciously. Again, Dr. Groopman argues that the use of gestalt in clinical practice need not be frowned upon, in fact, it is often necessary in situations of time-restraint. What needs to be amended in the curriculum is the explicit acknowledgment of pattern recognition in clinical practice in order to empower novice medical students to use it consciously and with full awareness of its pitfalls. Medical students are taught many skills to avoid technical errors; it is now time for cognitive errors to share some of the spotlight as well. And this new focus does not only apply to medical students, but to the entire

medical community. In *How Doctors Think*, numerous examples are offered of individual physicians or teams of medical care providers openly discussing cognitive errors and reflecting on changes both at their own individual and institution levels to avoid similar future occurrences. In that respect, Dr. Groopman's book is more than a candid reflection of our mistakes, it is also a celebration of those who, through creativity, open-mindedness and dedication, have been and will be learning from these mistakes to provide better patient care.

Chenjie Xia was the 10th Editor-in-Chief of the MJM. She is currently a first-year neurology resident at McGill. Her research interests focus on the role of the frontal lobes in affect regulation.