

# The First Cell and the Human Costs of Pursuing Cancer to the Last by Azra Raza

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Raza presents a compelling argument for a paradigm shift in cancer research and the treatment of cancer patients. From an early point in her long career in oncology she questioned the dominant strategy of fighting end-stage cancer and instead, she made a bold decision to focus her research on the first cells, cultivating her own tissue bank and projects for the purpose. For decades, doctors have been offering the same 'slash-poison-burn' approach with little progress or effect on prognosis and so, she implores change. To exemplify her theory, Raza perseveres with declarations that the most effective way to deal with cancer is to "detect it at its earliest stage". The current strategy of researching how to cure end-stage cancer, she believes, is futile as cancer is too complex.

The only hope of avoiding the "episodic wrecking storm" and "unmistakable wasting" that cancer creates when the disease advances and "all hell breaks loose" is prevention which Raza spells out in no uncertain terms:

"We are to stop developing minimally effective therapies and go for nothing less than a humane cure that will be applicable globally".

The blend of science, philosophy and heart are commendable. Not only is Raza a professional in oncology, she is a penetrating author who qualifies an urgent need for empathy and compassion in cancer care and research through her prose. She sorrowfully articulates losing her oncologist husband so tragically to the disease herself, and imparts the stories of people and patients with a stupefying prominence. These insights justify their exposure to convey the horrifying, cruel and inhumane suffering experienced as those in her care lived and died with cancer. Simultaneously, Raza examines and demystifies cancer, therapies and research strategies and disputes their utility with alacrity and intellectual grace. She is very humble and admits "we did not feel heroic but we did our best" as she battled cancer beside the protagonists in a captivating portrayal of vulnerability and vexation at a stagnant system costing cherished lives.

Throughout the chapters are inquiries and reflections of how to be a better doctor. Themes arise from her contemplations which unremittably relate to outdated treatments and research strategies which, after so long as a doctor being able to access only the same decades old methods, make her feel like a "fraud" when facing her patients. Several problems highlight her frustration with the current strategies and in order to effect change she invites her peers to reflect similarly and scrutinise her concerns:

1. Why do researchers chase cures for the last cell and not reverse the order of things to detect the first?
2. Why is there a deliberate blindness towards the use of mouse models which are practically worthless?
3. Why is the only choice to die of treatment or die of disease?

As Raza guides us through the fascinating and complex science behind how cancer develops, and the strategies which have been employed to investigate the mysteries so far, her critique unshrouds a ludicrous system. She solicits revolution

and offers a logical solution to the concerns she raises. Raza persuasively appraises exciting new therapy advancements and demonstrates how they could perhaps be more effective if combined with early detection technologies, rather than toxically fighting end-stage cancer as is currently the case. She is careful not to denigrate progress in treatment therapies and meticulous about what she is *not* saying regarding the weaknesses of various options.

The book may seem bleak and even hopeless at times but, there are numerous predictions based on early-detection technologies which profile Raza's fundamental optimism regarding the future of cancer treatment. The basis of the predictions bestow the foundations of her thesis; the proposal for detecting cancer early by "identifying the footprints of the first cell" and reapplying new technologies for early treatment - where they might be more successful - rather than end-stage when they are toxic. In brief, detect cancer early when cells are few in order to treat patients before cells become malignant and too many for treatment to be successful.

The proposed technologies to do this range from pills, to scans, to a simple finger prick. The suggestions are conceivable because so many advancements have been possible with the technology available now in other areas of medicine. Raza enthusiastically introduces pioneering researchers who are already developing the technologies of early detection now in other disciplines. But she expresses negative limitations which are hindering headway, namely issues of funding and the tendency for grants to be issued in support of ineffective mouse-based models, rather than human cell models. Raza is rigorously critical of this tradition in her field but acknowledges the value of mouse-models elsewhere.

As well as science and medicine, *The First Cell* delivers so many heart-felt insights into friendships, relationships and dying that it is palpable how much Azra Raza truly values people. It is to her credit how she can chronicle narratives, so conscientiously and authentically, to support her declaration that "the most beautiful thing in life is still an adult intimate relationship". Although this statement is mentioned towards the very end of the book, the foregrounding of her experience and prioritising of the human condition legitimates the testimonial with exceptional veracity, witnessed from start to finish. First and foremost, this book is a plea but it is also an account of love and suffering, as her, her family and her patients live under the constant spectre of cancer. Clearly, the connections she has made throughout her life are a priority she is fighting to keep alive for as long as possible and as painlessly as possible. Manifestly, the benefit is for the lives of as many as possible as she fights for the cause. The human connection expressed in the thesis is what research and treatment is lacking, argues Raza beautifully, and this book is a fine remonstrance against a flawed system which submits a confident and rational solution.