Off-label prescribing – Justifying unapproved medicine
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David Cavalla
This book is for patients, who for too long have been misled about the fact that many of the prescriptions that are written for them are for unapproved for their circumstance. We are all patients, or potential patients, so really this book is for everyone.
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Foreword

NORD (The National Organisation for Rare Disorders) estimates that 25,000,000 Americans, 8% of the population, have a life-altering disease for which there is no currently effective therapy. Globally, 8% of the population would yield over 500,000,000 people similarly affected. Yet, under the current system, with all the knowledge, technology and money we have to invest in this problem, most people with diseases for which there are no, or only poor, treatment options have little hope of receiving an effective treatment in their lifetimes. Healthcare costs round the world keep rising, and a significant portion is spent on palliative care for diseases with no truly effective treatment. Those costs, plus lost productivity costs and the emotional trauma for patients and their families, directly or indirectly impact all of us.

The for-profit medical research industry is our current ‘solution’, but it can only work for some patients, and many serious conditions are left unaddressed. The major pharmaceutical companies invest more than US$ 70 billion per year in R&D to bring to market about 30 new drugs or drug improvements annually. Development takes 10–14 years and costs US$ 1.5 billion or more per new drug. Industry generally makes a lower investment in rare diseases, acute diseases, prevention and diseases of the poor where it cannot make a suitable profit. This is essentially a market failure, which restricts many patients from receiving solutions to their medical problems, and makes it unlikely that the for-profit system can conquer most of the 7000 diseases waiting to be addressed.

Other factors compound the problem. Academic research for diseases of the poor and rare diseases receive limited funding. Researchers often cannot or would not collaborate due to intellectual property and authorship concerns, so the limited funds that are available are not leveraged by collaboration. And philanthropic and venture funders are often stymied in their efforts to find the best treatment ideas and creating the research partnerships required to create treatments for these underserved patients and diseases.

Physicians, patients, payers, government and industry are all searching for solutions to this gaping treatment hole. One stopgap measure employed with regularity around the globe is to use drugs approved for one disease to treat another disease for which formal approval has not been obtained: this is called ‘off-label’ medicine. While on the surface repurposing of our existing therapeutic armoury has great appeal, when one examines this in more detail, significant peril is exposed. In practice, the freedom to prescribe off-label has often been abused by prescribers and industry: products have been used with inadequate evidence for trivial conditions, and commercial interests have trumped patient welfare. In order to sort this out, we need to differentiate the acceptable off-label uses from the unacceptable. But how?

David Cavalla examines, in great detail and with clear support, the issues of off-label drug prescribing. His evaluation is both broad and deep. He notes the value and the pitfalls of the practice, and offers cogent and feasible solutions to create greater value for patients. Most importantly, while sharing his expertise, he gives the reader the chance to draw his or her own conclusions. This is a very important book, because catastrophic diseases do or will impact many of us. At some point in each of our lives, we are likely to be faced with the need to find a medical solution to an unresolved
disease, either for ourselves or for someone we care about. And that solution might involve what David Cavalla calls ‘An Unapproved Medicine’. Armed with the knowledge in this book, you might make a different set of decisions or make the same decision better informed.

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Author’s note on the cover design

Off-label medicine is the technical term for medicines which have not been approved for the therapeutic purpose for which they are prescribed. It is a term with which most patients are unfamiliar, yet it can be likened to something with which is much more recognisable: off-piste skiing. The likeness, depicted on the cover of this book, extends on the one hand to the fact that neither practice is strictly illegal, and on the other to the fact that both practices are less safe and well-described than the authorised alternatives. Off-label uses of medicines are not regulated, so we have much less information about the safety and efficacy of the treatments. But sometimes, like off-piste skiing, there is no other way to travel.

To justify the use of an off-label treatment, there is one and only one person to bear in mind: the patient. But disposing of the other interests in the delivery of medicine, for example the pharmaceutical company that makes the product, the doctor who prescribes it and the government or insurance company who pays for it, is not an easy task.