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Risky Business

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Are we at risk of being at risk? That is the question posed by the editor of the *British Medical Journal* in a recent issue[1] about the substantial influence of the pharmaceutical industry over health care decisions being made by doctors in America. The issue introduced by BMJ brings to light the considerable need to analyze the effects of said influence on health care as a whole. Close attention must be paid to the symbiotic, and potentially detrimental, relationship taking place between medical doctors and pharmaceutical companies in terms of financial incentives; doctors with such financial ties will more than likely prescribe the companies' drugs to their patients whether these drugs are truly necessary or not. As future healthcare professionals, we must take this into consideration because a relationship like this one can result in millions of people taking unnecessary drugs due to the powerful influence of industry. This is the message being conveyed by Ray Moynihan, an Australian health journalist and author who set out to explore this viewpoint with his latest book*, Sex, Lies and Pharmaceuticals: How Drug Companies Plan to Profit From Female Sexual Dysfunction.*[2] During a stimulating and insightful lecture, Moynihan discussed the many financial ties between the pharmaceutical industry and doctors as well as the adverse influence the former have over the latter.

According to Moynihan's lecture, Female Sexual Dysfunction (FSD) is defined by the pharmaceutical industry as a disorder of desire, arousal, orgasm and pain. Many studies had been conducted to assess the prevalence of FSD with resulting claims that up to 50% of women suffered from it.[3] A survey asking questions such as "Do you ever lack interest in sex?" and "Do you have trouble getting aroused?" was given to a group of women, and, if any single question was answered with "yes," the women were diagnosed with FSD. That doesn't seem too accurate or believable, but this was perceived to be a legitimate disorder for some time. *The Journal of Sexual Medicine* later published an article about decreased sexual desire in females, and the study was funded by the pharmaceutical company, Boehringer Ingelheim (BI).[4] In addition, one third of the study researchers were employees of BI, and the lead author of the study had financial ties to at least ten pharmaceutical companies—perhaps a major red flag when it comes to conflicts of interest? Celebrity spokespeople were endorsing drugs indicated for FSD while there were no unbiased studies in existence that proved this "disorder" was a major problem; non industry-funded studies showed different results.

Though pharmaceutical companies clearly have financial motives for marketing their own products, it may not be fair to completely write off their providing funding for some studies. In the testing process, studies can potentially lead to the discovery of information that may prove to be beneficial for the general public. Consider the example of a study that concludes that Drug X is efficacious for an additional disease state, or that the drug can be used safely in patients for a longer period of time. The manufacturer would definitely benefit from this study's creating an expanded need for the drug, even increasing patent life and exclusivity. At the same time, there may be patients who can potentially benefit from such evidence as well. However, this information—particularly if it discredits a product—may not be made as readily available and herein presents the battle of the ethical and financial incentives. Moynihan's main point spoke to the overwhelming need for both the healthcare system and healthcare professionals to reestablish independence from the influence of pharmaceutical companies that habitually put profits ahead of the best interests of their customers: the public.

This issue ought to raise questions in everyone's minds, especially those of us whose future career is tied to the public's use of prescription drugs. A fundamental question should be asked: who is funding these studies? Clearly, the testing of new expensive drugs requires money for resources such as study materials, personnel, and of course, the drugs that are being evaluated. Since manufacturers invest money in a process or product in the hope of securing a profitable future, the potential of this bias affecting the presentation and thus validity of the results must be critically explored.

Similarly, it is important to ponder the question of who would benefit from study conclusions. While evaluating a study to consider how findings will affect clinical practice, it is necessary and important to consider how the study conclusions will affect the industry, third-party payers, and potentially treatment guidelines that may shape medical practice itself. Hence, another related question emerges: what studies are used by the experts to write the practice

guidelines, and do these experts have any conflicting interests?

Another aspect to add to this list of questions is the increasing emergence of "me-too" drugs. Where are these new drugs coming from? It could be the product of years of new research, or the product of a slight change in chemical structure that allows it to be classified as a "new" drug. As we take a closer look at the nation's healthcare spending, it warrants our concern of adding drugs to the market that actually provide breakthrough treatment option for burdensome diseases instead of adding to an existing cohort of options that all perform similarly. Does the world really need another proton pump inhibitor or SSRI? A potential challenge now is to increase market share and convince both patients and the prescribers that a new drug is worth the added cost.

We are all witness to television commercials for a drug that seemingly turns a person's life around from black-and-white depression to sunshine and rainbows in beautiful fields of grass. People are holding hands with ear-to-ear grins or kayaking after taking this brand new drug; the celebrity endorser of the drug is quick to imply that if it worked for them, it will definitely work for you or your patient, albeit people respond to these commercials in different ways. Some will immediately speak to their doctor about wanting to try this fabulous new drug that can be the magic cure for the ailment they just diagnosed themselves with. Some will wonder whether the information in the commercial is believable and trustworthy or if this is just another advertising technique of the pharmaceutical industry to make more money. Yet others may opine that the benefits of Direct to Consumer advertising can help increase patient awareness of the existence of possible treatment and give patients more incentive to visit their doctors and discuss whether the drug may be right for them; if consumers become more informed about their health condition from a commercial, they will likely seek medical care and therefore improve the quality of their health. However, with overwhelming health care costs burdening the country's economy, we must consider the universal effects of DTC advertising. Billions of dollars are spent on pharmaceutical advertising annually, which then directly contributes to the amount of money spent on prescriptions. What if that money were spent on programs promoting preventative care or medication therapy management? If pharmaceutical companies chose to shift their focus from gaining profits to improving the health of their consumers, this would definitely be a major step in the direction health care has been trying to move towards: better quality care at a lower cost in the long-run.

When the top story on the evening news is about a groundbreaking study that was just published, it is our duty to ask questions and delve further into the details of how the study was done and who had particular interests in it. Unfortunately, as it is now, there is arguably not enough understanding of application of literature evaluation and how treatment guidelines are established. Perhaps we could explore more balanced discussions about a pharmaceutical industry that directly affects pharmacists and student pharmacists alike. Though this is not a new topic, as student pharmacists, we witness how new drug marketing and published literature can be biased and warrants that we be conscious of this in our daily learning. Fortunately, there is a wealth of information and books available on the topics, and like in any discipline, deeper learning requires going beyond what is presented in the curriculum and seeking outside knowledge to enhance classroom teaching. It is in this way that we become more aware and able to educate ourselves, each other, and the public. By encouraging debate, we can change perception and bring change. Recently, Boehringer Ingelheim announced a halt to research on "female Viagra." This is a small, yet encouraging victory, and further triumphs will be dependent on the efforts of us future healthcare professionals. So here is one last question to think about: from inception to marketing, and from marketing to media, where do we fit into this risky business?

References

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