144 North Dithridge Street, Apt 607 Pittsburgh, PA 15213

January 13, 2020

To whom it may concern,

Everybody understands efficacy. Even young children understand that medicine is intended to cure people. It is concerning; however, that healthcare practitioners and students often overlook the other side of the risk-to-benefit equation: patient safety.

I don't blame these practitioners because, before I witnessed iatrogenic patient harm first-hand, I was one of them. It is exciting, pleasant, and even self-fulfilling to imagine that our treatments are always helping patients. In contrast, it is quite difficult to come to terms with the realization that your recommendation could actually cause a person harm. However, two recent situations have left unforgettable impressions on me. First, I learned that one of my childhood friends become addicted to prescription medications intended to treat a moderate injury. Secondly, I saw a patient suffering from antibiotic-associated *Clostridium difficile* superinfection. In both cases, the medication harm significantly outweighed the treatment benefit. Arguably, both outcomes were entirely avoidable.

Although these cases have alerted me to the personal importance of medication safety, the statistics regarding the scope have been deafening. According to the World Health Organization, medication errors are a leading cause of preventable harm, amounting to annual healthcare costs in excess of \$42 billion globally, as well as over 1 death daily and 1.3 million injuries annually in the United States alone.

If given the opportunity, I intend to complete a Global Patient Safety rotation at Astra Zeneca. I am interested in this rotation because I realize that although efficacy is also important and perhaps more popular, patient safety must be the foundation of drug development. As the Hippocratic Oath says, "first, do no harm."

Best wishes,

Mohamed Kashkoush

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