A Duty Ethics Analysis of Turing Pharmaceuticals' Daraprim Price Hike

STS Research Paper
Presented to the Faculty of the
School of Engineering and Applied Science
University of Virginia

By

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April 13, 2020

On my honor as a University student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments.

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Introduction

In 2015, Turing Pharmaceuticals acquired a 62-year-old antiparasitic drug, Daraprim, and increased the price from \$13.50 per pill to \$750 per pill (Pollack, 2015). This case is notorious in the zeitgeist, even making a quasi public villain out of the former Turing CEO who was in the role at the time of this case. Many scholars agree with the general public opinion that this price increase was immoral. However, they focus instead on potential legal or policy responses to either punish Turing for their actions or to prevent similar phenomena in the future (Carrier et al., 2016; Tallapragada, 2016). These scholars lack specific analysis about why we believe these actions were unethical. By only focusing on how to address the problem without considering the reasons why Turing's actions were immoral, we as a society are missing an opportunity to develop our ability to make ethical judgments and support them with reasoning.

Drawing on the Kantian framework of duty ethics, I will argue that Turing

Pharmaceuticals' actions to hike up the price of Daraprim were immoral. Specifically, I will

illustrate this claim by showing that the actors who instigated the Daraprim price hike were not

in compliance with either formulation of the categorical imperative, neither the universality nor

the reciprocity principle, and thus were not autonomously obeying this universal principle out of
a sense of duty.

Background

Daraprim, the commercial name for the drug pyrimethamine, was first approved by the FDA in 1953 (Johnson, 2017). The drug is the standard of care for treating toxoplasmosis, which is a parasitic infection that can cause life-threatening issues particularly for people with compromised immune systems, such as patients living with HIV/AIDS or patients with certain

forms of cancer (Pollack, 2015). For many years, Daraprim cost only \$1 per pill, but this changed in 2010 when CorePharma bought the marketing and distribution rights and increased the price to \$13.50 per pill (Long, 2016). Five years later, CorePharma sold Daraprim's U.S. rights to Turing Pharmaceuticals who staggeringly raised the price to \$750 per pill, more than a 5,000% price increase overnight. According to a current drug price search, getting a prescription of one pill a day for ten days filled at a CVS Pharmacy in Charlottesville, Virginia, would cost \$8,162 (RxPriceQuotes, 2020). That is more than \$800 per pill, an even further increase from the hike in 2015. Turing's founder and former CEO, Martin Shkreli, was subpoenaed for questioning by Congress in 2016 as a result of this price hike, but he invoked his Fifth Amendment right against "self-incrimination" and refused to answer questions (Mangan & Rosenfeld, 2016). Turing Pharmaceuticals is now called Vyera Pharmaceuticals, but to avoid confusion I will refer to the company as Turing throughout this paper since this was the name it was under at the time of the case I am examining.

Literature Review

A small number of scholars have examined the case of Turing Pharmaceuticals'

Daraprim price hike to determine how legal and political actors could and should respond to the case. These scholars' arguments rely on the assumption that both they themselves and their readers are already in agreement that Turing's actions were unethical. However, there is a noticeable lack of scholarly arguments for why in fact Turing's actions were immoral.

In "Using antitrust law to challenge Turing's Daraprim price increase," Michael A. Carrier et al. conducted an analysis of the Daraprim price increase from a legal perspective, arguing that Turing's actions were in violation of antitrust laws (Carrier et al., 2016). They

acknowledge that the "price hike on the unpatented drug was met with widespread outrage," but the focus of their paper was not on the price hike itself. Rather, the authors were concerned with Turing's distribution of the drug. This distribution scheme was restricted so that supplies could only be acquired from one source, Turing, instead of a system in which the drug was widely available. Combined with an apparent lack of justifications for this restricted distribution, Carrier et al. claim that this is the basis of an antitrust violation. The authors also consider the second element of monopolization claims, exclusionary conduct, and determine that Turing appears to have engaged in such conduct. They conclude that this combination of monopoly power is the "hallmark of a monopolization claim" and that "Turing's behavior warrants close antitrust scrutiny." While the argument for this proposed legal investigation into Turing's actions is convincing, it is important to note that legality does not always align with morality, so there remains a need for an additional ethical analysis of this case.

Naren Tallapragada highlights the Daraprim case and outlines possible policy solutions to high priced off-patent drugs in "Off-patent drugs at brand-name prices: a puzzle for policymakers" (Tallapragada, 2016). He acknowledges that Turing was able to set such a high price for Daraprim due to its limited patient population, an absence of competing manufacturers, and a lack of therapeutic alternatives that all led to an effective monopoly. His argument differs from Carrier et al.'s in that he states that "it is unclear that Turing engaged in anticompetitive behavior to obtain its market position," so using antitrust law may not be a viable option. Thus, Tallapragada outlines solutions to this problem that he believes policymakers should consider, including explicit drug price controls set by the government and incentives for generic drug

manufacturers. The argument of this paper is again less about the actual increasing of price that Turing did and the morality of those actions and more about how to respond to the problem.

Both of these scholarly arguments contain well-reasoned ideas for approaches to address the issue of the Daraprim price increase: antitrust scrutiny over Turing's actions and ideas for new policies that will discourage this behavior in the future. While both arguments rest on the fact that Turing's extreme increase of the price of Daraprim was unethical, neither argument actually explores why this is, instead focusing on legal and policy responses to the case. Thus, I will analyze the morality of Turing's actions under the framework of duty ethics to illuminate why the normative judgment that these arguments rely on is valid.

Conceptual Framework

The morality of Turing Pharmaceuticals' actions can be analyzed using a duty ethics framework. The framework of duty ethics allows one to judge an action as morally right if it agrees with a certain moral rule (van de Poel & Royakkers, 2011). There are a variety of duty ethics theories, but the most well-known version was developed by Immanuel Kant, and this is the framework I will employ in my analysis of the Daraprim price hike.

According to Ibo van de Poel and Lambèr Royakkers, "A core notion in Kantian ethics is autonomy" because humans should have the ability to determine the morality of an action through reasoning (van de Poel & Royakkers, 2011). It is our *duty* to, independent of external norms, place a moral rule upon ourselves and act accordingly. If we autonomously obey this rule out of a sense of duty, then we are acting with good will. This moral rule according to Kant is the categorical imperative, a universal principle from which every possible moral norm can be derived. There are two forms of this categorical imperative, highlighted as follows:

<u>Version 1</u>	Version 2
"Act only on that maxim which you can at the same time will that it should become a universal law."	"Act as to treat humanity, whether in your own person or in that of any other, in every case as an end, never as means only."

Figure 1: Two Forms of Kant's Categorical Imperative

The first formulation of the categorical imperative is the universality principle. To put it in simpler terms, it tells one to think "What if everybody did this?" before acting. If everybody were to act in this fashion and nothing bad would come of it, then the action is in agreement with the universality principle and is thus morally right. On the other hand, if the act of everybody doing a certain thing could cause problems, then this action is discordant with the universality principle and is thus immoral. The second formulation of the categorical imperative is the reciprocity principle. This version in understandable language tells us to respect all humans as rational people who are capable of making rational decisions for themselves. If one's actions do not impede upon others' abilities to make their own rational decisions, then these actions are in accordance with the categorical imperative; they are moral, and vice versa.

In what follows I examine the case of Turing's Daraprim price hike through the lens of Kantian duty ethics. By analyzing whether the company's actions are in agreement with both versions of the categorical imperative, the universality and reciprocity principles, I will determine whether the price increase was moral based on the actors' duty to autonomously obey this rule.

Analysis

In this section, I will demonstrate that when Turing Pharmaceuticals increased the price of Daraprim from \$13.50 to \$750 after acquiring the drug, the company was acting immorally.

Under the framework of Kantian duty ethics, people are acting with good will when they choose to obey a universal moral rule out of a sense of duty (van de Poel & Royakkers, 2011). This universal moral rule, the categorical imperative, takes its shape in two different forms. In the following subsections, I will detail how Turing's actions are discordant with both of the forms of the categorical imperative. By acting in ways that disobey the norms described by both the universality and reciprocity principles, Turing ignored its obligation to obey this moral rule and was not acting with good will. According to Kant, these actions were unethical.

Universality Principle

Turing's actions to increase the price of Daraprim by more than 5000% were immoral because they did not agree with the first version of Kant's categorical imperative, the universality principle. As stated above, this principle tells people to "Act only on that maxim which you can at the same time will that it will become a universal rule" (van de Poel & Royakkers, 2011). Essentially, the universality principle implores people to think before they act: What if everybody did this? Would I wish to live in that world? Considering the implications of a society in which our actions have been widely adopted translates to considering the morality of our actions. I argue that people may disobey this rule in one of two ways. The first and most obvious route of disobedience consists of people who do not so much as stop and think to consider a world in which their actions are universal before performing these actions. This is a clear violation of the principle and is thus immoral according to Kantian duty ethics. Disobeying this form of the categorical imperative may also involve people who do imagine if their actions become universal, can envision the negative implications, but commit the actions regardless.

Perhaps they foresee how a large portion of people will be negatively impacted, but they know that they will remain comfortable for various reasons. This is an unethical course of action.

Company	Year	Drug	Price Hike
Turing Pharmaceuticals	2015	Daraprim	5,500%
Rodelis Therapeutics	2015	Cycloserine	2,100%
Mylan	2016	EpiPen	400%

Figure 2: What if Everybody did That? Various Drug Price Hikes

So how did Turing's price hike violate the universality principle? Above, Figure 2 shows a table that displays multiple drug price hikes that occurred around the same relative time frame. In addition to Turing's hike of Daraprim, Rodelis Therapeutics greatly increased the price of cycloserine, which is used to treat tuberculosis and urinary tract infections (Pollack, 2015). Mylan also hiked up the price of EpiPens, auto-injectors that are used to deliver epinephrine and mitigate severe allergic reactions (Howard, 2016). It is important to note that while Turing increased the price of its particular drug significantly more than the other two companies, the price increase of the smallest proportion — EpiPen — still increased by five times the original amount. As noted by Heather Long in CNNMoney, "The 'Turing playbook' is spreading' (Long, 2016).

This trend of pharmaceutical companies dramatically increasing the prices of drugs for seemingly no reason other than to increase profits can be used to show that Turing did not follow the universality principle with regards to these actions. We do not have insights into the thoughts of the relevant actors at Turing that occurred during the conceptualization and implementation of this acquisition of Daraprim and the following actions, highlighted by Shkreli's refusal to answer questions before Congress. However, the data shown in the table in Figure 2 may be used to

illuminate a lack of concern for this formulation of the categorical imperative. It is clear that after Turing acted to hike up the price of Daraprim by more than 5,000%, other pharmaceutical companies followed suit. If Turing had taken the universality principle into account, it would have considered the possibility of this phenomenon occurring. Therefore, either Turing did consider a world in which other pharmaceutical companies took its lead and acted similarly, understood the negative ramifications, and acted as it did anyway, or Turing did not choose to imagine this world at all. In either scenario, Turing's actions were immoral according to the two different routes of obedience I highlighted above.

While I have just elucidated why Turing did not act in accordance with the universality principle and thus acted immorally, some may disagree with my argument. They may claim that this massive hike in price, along with the others that followed suit, would encourage economic competition through the development of generic versions of these drugs. These theoretical defenders of Turing could argue that the company did consider a world in which other companies acted in accordance with it, and it saw this world as one with a wealth of healthy capitalistic competition. However, this claim is limited by the fact that Turing's tightly-controlled distribution system made it "virtually impossible for a competitor to obtain enough Daraprim to develop their own version," and these tactics "undermine the whole generic drug approval process" (Perrone, 2016). Not only did Turing create a massive increase in the price of the drug, but it also went out of its way to prevent the competition that people who may defend the company's actions as moral would cite as their reasoning. This furthers my argument for why Turing acted immorally by not following the universality principle. If the company did consider a world in which other pharmaceutical companies engaged in drug price hikes as well

as employing the same distribution tactics, it would see a world with a distinct lack of competition, but it acted in this way regardless. On the other hand, Turing could just have acted in this way that benefited the company in increased profits without considering this theoretical world. My argument still stands that Turing acted immorally when the first version of Kant's categorical imperative is taken into account.

Reciprocity Principle

Furthermore, Turing's price hike of Daraprim was immoral because the company also did not abide by the reciprocity principle. This second formulation of Kant's categorical imperative states that moral people should "Act as to treat humanity, whether in your own person or in that of any other, in every case as an end, never as means only" (van de Poel & Royakkers, 2011). Translating this into modern English, Kant is guiding us to respect all other people as fellow rational humans who have the ability to make their own rational choices and judgments. Because autonomy is at the core of Kantian duty ethics, moral people autonomously obey the categorical imperative, which respects the autonomy of all other people. If people's actions impede the ability of others to make their own decisions about their lives, then the original actors have violated the reciprocity principle. By blocking others' ability to make choices that obey the categorical imperative, people themselves are breaking the categorical imperative and thus acting immorally. People are following the reciprocity principle when their actions have no effect on others' ability to reason and make their own choices, so they are acting morally.

Reported in *The New York Times* shortly after the price hike, "Martin Shkreli, the founder and chief executive of Turing, said that [Daraprim] is so rarely used that the impact on the health system would be miniscule and that Turing would use the money it earns to develop better

treatments for toxoplasmosis, with fewer side effects" (Pollack, 2015). In Shkreli's defense of his company's actions, it is important to note his shift of focus to the claim that Turing will use the influx of money to "develop better treatments." In combination with the evidence provided in the previous subsection that Turing acted to thwart the development of generic forms of Daraprim, we can observe actions that are discordant with the reciprocity principle. By stopping the development of a generic version of this drug, charging significantly much more money for Daraprim, and aiming to use that money to develop better treatments, the ability of patients to make their own rational decisions about their own healthcare is impeded. They are essentially forced to pay the exorbitant price of Daraprim while Shkreli comforts them by claiming that his company will find a better way to treat their infections. Shkreli and Turing are the gatekeepers of this facet of the healthcare world, and this is immoral per the reciprocity principle.

Vyera aims to facilitate patient access to its treatments.

Vyera provides support to programs that assist patients who may have difficulty affording their treatment and gives discounts to organizations that provide care to underserved patients.

Figure 3: Vyera (Turing) Pharmaceuticals' Mission

Additionally, Figure 3 shows from the current Vyera Pharmaceuticals website that the company claims that it provides financial assistance to patients who cannot afford their treatment, i.e. Daraprim (*Our mission*, n.d.). The word choice in this excerpt is important. Vyera (Turing) refers to patients "who may have difficulty affording" Daraprim without taking any blame for the fact that these patients cannot afford the drug. The patients who already must rely on Turing as the sole provider of the drug that they need also must rely on the company to help them afford it at an excessive price point that the company itself has set. Turing's actions have created a situation in which the relevant patients no longer have the ability to reason and make

decisions with their doctors about how to address their health issues, breaking the categorical imperative.

Further, Long reported in CNNMoney that one doctor has witnessed patients "jump through hoops" to get Daraprim at a reduced or free price (Long, 2016). To get this financial help from Turing, "Patients have to prove both financial need and health status, something that's difficult to focus on when their lives are in danger." In one specific case, this doctor had a patient give up on attempting to get Daraprim for free who then had to switch treatment therapies and ultimately suffered a negative side effect due to this. This anecdote directly illustrates how the extremely high price of Daraprim hinders patients' ability to use reason when making choices regarding their health and may ultimately suffer because of it. Turing's choices to radically increase the price of Daraprim, to block the development of generic forms of the drug, and to create an ineffective financial aid system for the drug all combine to create an environment which disrespects patients in need of Daraprim as rational beings capable of making rational choices. Thus, Turing's actions contradict the reciprocity principle and I judge them as immoral under a duty ethics framework.

Conclusion

The morality of Turing Pharmaceuticals' actions to increase the price of the drug

Daraprim by 5,500% after its acquisition in 2015 can be analyzed using a duty ethics framework.

Specifically, Immanuel Kant's theory of duty ethics provides the categorical imperative, a

universal moral rule that takes its shape in two forms: the universality principle and the

reciprocity principle. I have argued that Turing neither acted as if its actions were to be taken up

universally, nor did it act with the respect of Daraprim patients as rational people capable of

making their own decisions, therefore its actions were immoral. Promisingly, legal action has

recently been taken against Martin Shkreli for monopolizing Daraprim while he was chief

executive at Turing, following the argument for the case as an antitrust violation made in Carrier

et al.'s article (Forkin & Mangan, 2020). While much of the public generally agree that Turing's

actions were not morally correct, there is the potential that Shkreli will not be legally punished

for these actions. Elucidating this case provides an opportunity to develop our ability to make

ethical judgments using reasoning, which may be necessary in the event that the law does not

align with morals.

Word Count: 3442

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