Concerning the Ethics of Justice, Care, and Personal Responsibility as a Framework for Criteria Selection in Transplant Recipients

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Abstract: Organ transplantation centers set criteria for candidate qualification, which has led to disparate healthcare resource allocation practices affecting those with a substance use history. These individuals are denied organ transplants by committees and healthcare providers who assign them lower priority status. The lower priority argument claims that healthcare resources should not be provided equally to individuals who fail to share responsibility for not doing enough to address the diseases associated with substance use. The purpose of this paper is to explore the interrelatedness between the ethics of a merit-based system of moral responsibility and the lower priority setting involved in healthcare resource allocation pertaining to those with substance use histories. An interdisciplinary approach to the argument against the lower prioritists is taken with a focus on the relationship between different organ allocation practices affecting substance users and the justification for resource allocation practices of healthcare and transplant committees. Lower priority setting is challenged, and an argument is offered in which substance users are assigned higher priority when relying on "doing enough" in a merit-based system of moral responsibility. It is determined that one cannot substantiate assigning a lower priority status since a lack of success in rehab does not imply a lack of effort. Additionally, neither to confirmatory behavior nor to non-conforming behavior may freedom be justifiably ascribed in a merit-based system of responsibility because freedom to choose can neither be established *a priori* nor *a posteriori* concerning meritorious behavior.

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Introduction

Every day in the US, approximately twenty-two patients in need of a transplant die due to the high demand and short supply of available organ resources (Facts and Myths about Transplants, 2010). Artificial organs and medical transplant technology provide life-saving opportunities for many people. Nevertheless, as promising as organ transplantation may be for society as a whole, the occurrence of disparate organ resource allocation practices reflects bias by only affecting a certain portion of potential recipients. That portion includes various marginalized groups, like those with histories of substance use. While general guidance concerning policies may trickle down from organizations such as the Organ Procurement and Transplant Network (OPTN), individual healthcare organizations are left to determine how to implement them. Consequently, the criteria utilized in the implementation of policies are not consistent and have resulted in the denial of people with known substance use histories.

Nonetheless, research shows that substance users receiving transplants do not relapse, nor is there evidence of significant differences in the success of transplantation procedures. Thus, denying substance users—even those using prescription marijuana for medical reasons—is unfounded and unjust. The case is made against the denial of service to substance users based on available evidence and provides a claim of interpretation, stressing the importance of how efficiency is understood. The thesis is that the denial of substance users who use marijuana is unfounded based on a lack of evidence. In the present paper, it is argued that there ought to be equal consideration given to all potential recipients, regardless of substance history. I consider potential causes related to the denial of substance users in need of organ transplantation prompted by the occurrence of denial due to marijuana use, even when medically prescribed. I argue that practices undermining the decision-making process concerning opportunities for organ transplantation for substance users are not based on science; they are based on how physicians and transplant review boards value them. Corrective measures can be implemented, but they must begin by demonstrating the value of the lives of past and present users to society as well as ensuring equitable opportunities to transplant resources among those in need in the US.

Background

Ethics is at the core of decision-making concerning the allocation of organ transplant resources. Specifically, the ethics of justice and care are involved. While the ethics of justice constitute an ethical perspective that is more universal in its approach to decisions that are made in terms of being consistent and verifiable, the ethics of care considers the involvement, needs, and participation of others as a vital aspect of each ethical decision (Botes, 2000).

Based on the nature of healthcare and maladies, although ideally universal principles should be the foundation for all fairness, healthcare providers, patients, and their histories, as well as their families, are all affected by the decisions that are ultimately made. Thus, though the universality of the ethics of justice may be necessary, they are insufficient alone because of the lack of consideration for personological variables that are unique to each patient. For this reason, a mixture

of both principles of the ethics of justice and care would be ideally suited for purposes of resource allocation concerning organ transplantation.

Given the nature of transplantation, the ideal blend of ethical principles concerning both justice and care may focus on either the donor, the recipient, the organ being transplanted, or the process of deciding to whom it should be allocated. Additionally, the motivation for the decisions made (e.g., why people donate and why boards choose particular people over others) or the consequences of the process (e.g., goodness, who benefits, or worthiness) will guide prioritization efforts primarily. Because of these aspects, it would appear as though both deontological and consequential ethical frameworks could be appropriate perspectives to consider when deciding upon candidate selection criteria for prioritization and resource allocation. Deontological positions hold that there exists a "duty" in either procuring things real or abstract or in committing particular actions based on the merit of their intrinsic value, which ought to suffice in persuading one to act (Alexander & Moore, 2016). When the merit behind procurement or committal is not perceived as being intrinsically situated within the context of the act or thing itself but is, or ought to be, based on the results or consequences of such, an individual may be said to espouse a consequentialist viewpoint, according to Alexander and Moore (2016). There may be various manifestations of either ethical position. For instance, focusing on the "good" as a result, why wouldn't consequentialists aim to maximize it? Well, some do aim to do so, but it may come at a steep cost for those who do not benefit. Although the end is noble in appearance, the cost negates the value in some instances; the implication is that how that good is achieved is not a concern to the extent that intentional killing or otherwise violating individuals may be permissible to bring it about. This variety of consequentialist view may be referred to as "utilitarianism," and as one would imagine, utilitarianism is fraught with its own difficulties. Although this consequentialist manifestation seems to be extreme in its farsightedness with respect to the "good" in mind, because one is guided by the ends or outcomes (i.e., products), it could be argued that these individuals are susceptible to missing the forest for the trees.

The overall goal from the perspective of utilitarianism is grounded in the foundational principle of beneficence, or "doing good." Although aiming to do the most good according to such a principle may be commendable, actually carrying out any plans in the name of benevolence can easily become a nightmare should an "ends justify the means" framework be adopted. Therefore, a deontological lens, I believe, would be more appropriate for the tasks involved in resource allocation because deontological frameworks are metacognitive in that they employ evaluative assessment of the duties or obligations performing the processes for their own sake as well as their respective outcomes.

Allocation of resources in limited supply requires priority assignment of recipients. When considering potential criteria for use in determining prioritization, there are a variety of frameworks from which to address the task. Nonetheless, in addition to the lens through which a problem is framed, consideration must be given to the personological variables of the potential patients being considered for resource allocation. Personological variables may be understood as characteristics or properties that are unique to a particular individual or group (Martella, Ron Nelson, Morgan, Marchand-Martella, 2013). At first glance, some may argue that personological variables would be counterintuitive as a legitimate consideration given the context of objectivity and rationality involved in the allocation of resources, which would be violated. Certainly, a level of objectivity and rationality are crucial to maintain to ensure the most efficient and equitable use of resources.

Unfortunately, though, because no two people have an identical set of characteristics, these characteristics individuate potential recipients and are those on which candidate selection teams must rely – at the very least.

Metaphysics and the Philosophy of Mind: People as Substances, Properties, or Both

As a framework for criteria selection concerning resource allocation, instead of relying on personological variables to attempt to allocate resources more objectively, would it benefit donation committees tasked with the decision of whether to allocate if people could be viewed from the perspective of pure characteristics? Another framework that would be better to adopt and offers a more objective approach is worth considering. While a deontological framework is a good candidate, one cannot help but wonder whether a more suitable lens is possible. So, let us consider the following: For obvious reasons, without a single personological variable, there could be no possible allocation of resources. Additionally, since properties are contingent on the prior existence of something of substance (E1d5), by virtue of their existence, all things of substance can be said to necessarily have at least one property.

However, depending on one's metaphysical perspective concerning the philosophy of mind with regard to the existence of substances and properties as well as their relationship to one another (e.g., monism versus pluralism), there may be some variation in the manner in which one frames the issue that raises an intellectually abstract yet interesting question: The question is relevant to resource allocation and criteria selection because the discrimination employed in choosing particular criteria that must be met for allocation that allows distribution of resources is contingent on the recipients ultimately selected possessing certain properties shared among them while others are not. As it turns out, there must be at least one property for a sentient being to perceive the existence of a substance. Moreover, a property itself being predicated on a thing (Orilia & Swoyer, 2017) implicates the existence of at least one substance.

Accordingly, our question may be simply answered based on the following relation: at least one property can be said to exist if and only if there exists at least one substance on which the property may be predicated. In other words, the question really should not have been phrased in the disjunctive because the existence of a substance requires that there be a property. Therefore, what I genuinely want to know is with what combination of substances and properties an effective framework could be applied to resource allocation. To determine what feasible substance-property cardinality pairings exist, I shall first consider the existence of a hypothetical individual. Let us assume that they claim that there exists no more than one substance, which would be classical substance monism.

Now, were I to take such a position regarding monism to the extreme, despite what objects or things this individual may perceive (e.g., another person), much like Descartes, this individual is the only thing about which they can be certain. It is in this fashion that one could arrive at such a monistic belief system that regards a person as a single substance. Given our understanding of the relationship between substances and properties, considering this person as a substance, there would at least need to be one property that could be predicated of them (e.g., a thinking thing). Nonetheless, while philosophically possible to espouse, such a perspective to frame people for

resource allocation would be of no use to anyone. Since the existence of one property leaves no way of discriminating among potential recipients, committees could not choose. Furthermore, without a limitless organ supply, committees could not provide for all who needed organs since demand would exceed what was available. Thus, this perspective would not be beneficial to adopt as a framework for allocating organ resources.

As for utilizing as a framework for criteria and allocation a substance pluralist position, immediately the following may be concluded: A claim or belief that there exist multiple substances would mean that, to allow for this possibility, property monism must be eliminated for obvious reasons. That is, granting multiple substances (i.e., people) and each one predicating the very same sole property would render resource allocation as pointless as it would be for substance monism with property monism. Therefore, substance pluralism would seem to be inconsistent with property monism and can be excluded as a potential framework for criteria selection in resource allocation.

That notwithstanding, although beyond the scope of the present undertaking, philosophically speaking, substance pluralism could be argued as consistent with property monism if one were to rely upon such controversial theories as that of haecceities in their defense (Please see Cowling (2016) if you are interested in learning more about the topic). Although technically consistent positions among themselves, to simultaneously hold substance monism and property pluralism would be as untenable as property monism for the purposes of resource allocation. If people are viewed as having different properties but of the same substance, then using properties as criteria for allocation ends up being moot since people comprising one and the same substance are distinguishable solely by "properties." There would be no justifiably legitimate basis for allocating resources since there would be no "substantial" difference in who committees ultimately choose. Lastly, as for classical monism as a lens, people would comprise one substance, and there would be an ability to perceive no more than one property or characteristic.

Despite one substance and one property being consistent with one another, there would be no use for it as a framework for criteria selection or resource allocation. Upon considering the alternatives, it appears as though adopting a framework that views people as one substance may not be the best choice. The main reason I am against such a position of substance monism as a framework is due to the inherent difficulties associated with the process of discrimination among potential organ donation recipients, regardless of the number of properties allowed. What I can, therefore, claim with certainty is that if people are comprised of substance, then there must exist multiple properties to use as criteria for discrimination and decision-making.

Additionally, if I admit property pluralism concerning people, then for a framework to be effective, I have explained that there must also be more than one substance to be of utility for resource allocation. Therefore, the only remaining tenable option for framing allocation would be for one to adopt both substance pluralism and property pluralism. Substance pluralism and property pluralism, I contend, would be most suitable as a guide for criteria selection and decision-making in transplant resource allocation because one would avoid the potential futility of either a restriction to one property shared by all or attempting to choose from among multiple properties when they are all predicated of just one substance, which would be absurd. Within substance and property pluralism as a framework, recipients may be viewed as distinct. Being distinct means being more than one substance, which would allow potential recipients to be discerned based on the various properties or characteristics and prioritized accordingly. The number of characteristics comprising

any set is inversely proportional to the number of potential candidates. That is, as the number of characteristics or properties comprising the set increases, the number of potential candidates decreases. To appreciate why this is the case, unless properties or characteristics are associated with one another, then the number of potential candidates with brown hair will always be greater than the number of potential candidates with brown hair and green eyes and six feet tall. Thus, the greater the number of properties to be satisfied by potential candidates the fewer the number of potential candidates actually satisfies them.

Given the task of allocating limited resources, there ought to exist an optimal number of properties or characteristics that allow there to be just enough to not exceed the resources. It cannot be emphasized enough that caution must be exercised in selecting the characteristics because either choosing the wrong quantity of characteristics or the incorrect qualitative properties could be disastrous. The only situation worse than having too few resources available to meet demand would be to underutilize the available resources. Resources would not only fail to meet the demand because the underutilization meant that some did not get what they needed, but the process overall would be wasteful due to inefficiency since resources were available but did not get utilized.

What I find troubling is that selecting the characteristics to result in an optimal number of candidates to minimize waste or overextension of resources then becomes dependent on the available resources, which will influence which sets of characteristics will be possible. So, instead of independent, objective criteria being chosen, the converse of what I intend, viz., to use an independent set of characteristics to determine who should get the available resources, is ultimately what occurs: the available resources will be used in order to determine the optimal set of characteristics to allow for supply to meet the demand that candidates should have to ensure efficient use. In other words, optimal is in reference not to patient outcome, time to recovery, health status, improved quality of living, or likelihood of recidivism; it concerns primarily the resources available to meet the demand instead of being wasted or overextended, disappointing patients who were optimistic. Therefore, efforts to justly distribute resources most efficiently wind up dependent on availability, and availability determines optimization, which in turn dictates which sets of properties or characteristics as personological variables produce a number of candidates matching available resources even if the properties are not necessarily the most relevant, reliable, or accurate of potential patient outcomes.

The question becomes, along with deontological ethics as a context and a pluralistic metaphysical viewpoint, whether efficient use of resources (i.e., not wasting) takes precedence over the outcome of the potential patient. Is it better for the transplant board or decision-makers to allocate the ten organs available once the choice of properties that produce exactly ten recipients is determined or consider personological variables that optimize outcomes at the expense of potentially wasting or giving false hope to those who will not get one? Despite the difficult nature of the previous question, I contend that how efficiency is understood is critical. Assuming the opposite as the worst-case scenario, which outcome is best: using the set of properties that results in the consumption of the exact number of transplant resources without having leftovers but having only half survive, or selecting the set of properties that have the highest chance of the patients chosen surviving, though those who don't qualify will unfortunately not survive with the transplant? In both scenarios, assuming equal numbers of people survive and do not survive, is efficiency using criteria to optimize use, so all ten organs are transplanted but five go to waste by

failing the patient or finding criteria that maximize the potential outcome of use but end up only using five transplants, all of whom survive, while the other five organs do not get used?

I argue that, while both maximizing uses of resources available in the former case is reasonable as an approach to efficiency, as is maximizing outcomes for efficiency in the latter case, efficiency as the maximization of chances at successful outcomes would be most appropriate as an approach to efficiency. Framing efficiency as the maximization of chances of successful outcomes comprises maximizing the use of resources as well as maximizing the potential success of recipients. According to the hypothetical example used, a multitiered system incorporating both interpretations of efficiency that results in maximizing chances of success would ensure that the optimal criteria producing the five most likely candidates to be successful recipients are allocated organs and that the remaining five organs be allocated despite recipients being less likely to survive; chances, no matter how unlikely they may be at survival, will always be higher for candidates who receive organs than those who do not receive them.

To frame the maximization of chances, I suggest personological variables. Though they may be peculiar to the individual, these characteristics relate to the person and could significantly affect the outcome of procedures utilizing allocated healthcare resources. Many would claim that when a resource to be allocated is an organ for life-saving transplantation, among the most crucial personological factors that ought to be considered as a relevant criterion is the substance use history of the potential recipient. Nevertheless, contrary to what many may believe, the argument herein does not suggest that substance use or abuse history as a relevant criterion be considered for purposes of exclusion; rather, it ought to be considered as support for equal consideration of individuals with such a past for their potential value and contribution to society.

Although substance use may have mixed effects on organ transplantation, alcohol and substance use prior to transplantation in patients with nonalcoholic liver disease is more common than one would suspect (Schult et al., 2019). Rai & Winder (2017) found that recent studies suggest that the overall survival rates in kidney, liver, lung, and heart transplant patients using marijuana are equivalent to those in non-users, suggesting that marijuana use does not affect the overall survival rates of organ transplant patients. However, Dew et al. (2008) found that the average alcohol relapse rates for liver transplant patients are 5.6 cases per 100 patients per year for relapse to any alcohol use and 2.5 cases per 100 patients per year for relapse with heavy alcohol use, and that the average illicit drug relapse rate is 3.7 cases per 100 patients per year. This suggests that substance use may lead to relapse in organ transplant patients. Sandhu (2011) found that when compared with those with no substance abuse, abusing all three substances was associated with reduced transplant access, suggesting that substance abuse may reduce access to organ transplantation.

Substance Use and the Paradigm for Poor Choice

The substance use history of a candidate would be regarded as an appropriate personological variable for consideration because of the potential for continued use or relapse. Various studies have considered the risk of relapsing for substance users (Facts and Myths about Transplants, 2010). The occurrence of relapse is relevant because it potentially undermines the outcome through the return to the use of licit and illicit substances, which may compromise the success of the organ graft either directly or indirectly. Directly compromising the outcome would be the case in which

a liver transplant recipient resumes the consumption of alcohol, which damages the organ received. Conversely, indirectly jeopardizing the result of a transplant would be the case of marijuana usage, which leads to cognitive and functional impairment with poor decision-making (Volkow, Baler, Compton, & Weiss, 2014). The paradigm for poor choices relates to the decision to operate a motor vehicle while under the influence (OUI). It is because of both cognitive and functional impairment caused by the consumption of alcohol or other mind-altering substances that most would agree that operating a vehicle under the influence of either an illicit substance or an unlawful amount of substance demonstrates poor decision-making. Qualification by illicit means is necessary to account for relative differences in jurisdictional legal limitations, weight, and metabolic differences between individuals.

Without discounting the choice to OUI or to consume substances of any sort, an important question that might be raised is the following: "If determined to be under the influence of a substance when poor decisions were made, can someone be truly held directly accountable through a personal responsibility narrative for the choices that were made?" A meta-analysis has shown OUI to result in a twofold increase in the likelihood of having a collision in which serious injuries or death are a consequence (Asbridge, Hayden, & Cartwright, 2012). Given the gravity of the potential consequences that directly or indirectly compromise both the organ transplant outcomes and lives of recipients and the public resulting from a relapse that are related to the personological variable of one's substance use history, the choice of approach to assessment criteria and prioritization for healthcare resource allocation is paramount. Since the seriousness of the consequences just discussed appears to be related to the choices made, the actions taken, and the lack of responsibility exercised on the part of the individual as demonstrated by their engagement in potentially harmful or reckless behavior, should someone, as a result of their choices and actions, need organ transplantation, it would seem reasonable to favor an approach that considers these aspects in their candidate selection process. One such approach that incorporates these aspects is the practice of priority setting and resource allocation in healthcare.

Priority Setting and Resource Allocation

Priority setting refers to the ranking of patients according to levels of importance or urgency for purposes of rationing resources to be allocated. Priority setting as a practice is often most fervently implemented when the demand for a resource exceeds supplies (Hendry & Walker, 2004). In support of priority setting as an approach to healthcare resource allocation, Moss & Siegler (1991) argued that organ transplants and other healthcare resources should not be provided on an equal basis to individuals who have failed to share responsibility for their health conditions.

As it pertains to the topic of the present paper, such a failure on the part of individuals is assumed to be demonstrated by the development of diseases or conditions as a result of, or related to, risky actions or behaviors concerning substance usage that are known to have potentially adverse effects on health. According to this perspective, candidates in need of organ resources who have engaged in irresponsible activities or behaviors, such as those involving substance misuse and abuse, are given a lower priority status than those who do not have a known history, which effectively excludes them from becoming recipients. However, one problem with such an argument is that, despite there being a level of truth to the argument, medical conditions that can be caused by their use do not necessarily result from the voluntary decision to use. There is a questionable element in

this argument: substance use being causally related to developing the disease, leading to a need for organ transplantation. The existence of predispositional genetic influences on behavior engagement and substance use, which are unnecessary to develop disease, seriously challenges any policy relying on personal responsibility in selection criteria. Moreover, in addition to genetic predisposition, there are social determinants of health over which individuals have little to no control (Weinstein, 2015).

Although contribution to one's health may justifiably be stipulated for one to merit equal consideration and avoid a lower priority setting for organ resources, holding people accountable or penalizing them for their genetics, to which they are often likely to succumb, is tantamount to blaming them outright for that over which they have little to no control. Further, in those cases of cancer or other diseases that do result from either smoking or illicit substance use, research has shown that there is a genetic predisposition that contributes to engaging in these types of behaviors (Nestler, 2000). Thus, there may be no way to justify a lower priority setting based on failure to share personal responsibility, even for those who do require organ transplantation partly because of their own actions.

Despite the inherent problems associated with priority setting (PS) and personal responsibility (PR), basing the former on the latter does nothing but compound the significant issues at the center of the ongoing debate. Both PS and PR attempt to address the scarcity of healthcare resources and the burden that societal demands have placed on them. However, even if prioritization were to be perfected, since burdening may be understood as a direct result of efforts to meet the demands of all those in need, there will ultimately be individuals whose needs simply cannot be met.

There are many potential ways to approach solving the problem of unmet need. Each approach depends on the goal desired and the framework within which it is considered. Goals desired may include the ability to satisfy the needs of all, whether they have them or not. If attempting to satisfy the needs of all those who have them, either availability needs to be addressed (supply) or those who need them must be reconsidered (demand). The question as to whether all who have a need should be allocated resources is what I contend society has used as a proxy for a combination that is merely rhetorical: yes, all who have a need ought to be apportioned healthcare resources. Instead of increasing the supply, lowering demand to meet the available supply has the same effect; nonetheless, because demand cannot be lowered directly, there needs to be a way to effectively reduce the number of people who qualify so that it equals the available supply. One way to do this would be to establish criteria in addition to needs that must be satisfied. Realistically, since neither all needs can be met nor all the needs of those with them completely controlled, an ideal solution may be a combination of both or disregarding them both.

The rationale for such a conception on how to solve the problem of resource allocation is that the criteria in a utopian society used for the resolution of ethical issues involving priority setting and resource allocation (PSRA) would provide insight into how the problems facing the real world should be approached at a minimum. However, that does not imply it may be possible. In addition to the use of thought experiments in which resources are limitless for problem-solving, another variable, such as expected benefit, could be guaranteed for all who receive it, regardless of the patients' medical history or genetics. That is, knowing that the demand exists regardless of personal responsibility and substance abuse causing the need for the organ transplant, how would knowledge

that all of those who will receive have an equal likelihood of benefiting influence the PSRA procedures?

I would argue that, in theory, if the equivalent potential to benefit from the receipt of organ resources exists, then this would imply that the past may not have any significant bearing on the outcomes and need not be taken into consideration when allocating resources. In an article by Golan (2010), it was suggested that because healthcare is a social good that cannot possibly address the needs of all people due to limits in quantity, a determination of relevant inequalities as criteria should be considered from the perspective of a utopian society in which resources were unlimited. Society's approach to the distribution of healthcare resources via PSRA ought to be both sensitive and specific about the demands placed on it due to its constituent members' health needs. In this respect, which is analogous to and borrowed from the epidemiological meaning of the terms according to Boslaugh (2015), efficiently addressing a society's needs, whether they be utopian or otherwise, would require resources to be allocated in a sensitive manner such that only those who truly need them because they stand to benefit from them would receive them. Moreover, allocation in a specific manner would result in those either not needing or potentially yet realistically benefiting from these resources not receiving them. It would also be rational for resources to be appropriately allocated only after needs, risks, and benefits, among other things, have been adequately considered. Of course, definitions of need and benefit would have to be well-established beforehand. Nonetheless, considerate planning of policy procedures comprising needs, risks, and benefits could be a decent start for prioritizing patients and healthcare resources within a society.

Regardless of which procedure a society may select, in one form or another, there must be some protocol for sequencing both the resources and patients involved. I suggest that such sequencing may be understood conceptually through the principle of well-ordering. By "well-ordering," the principle refers to the existence of a least number that comprises any nonempty set of natural numbers (Cunningham, 2012). In this manner, once the decision is made, it becomes possible to arrange cases according to greatest need, least risk, and most significant benefit to calculate an overall priority that facilitates the distribution of healthcare resources.

The concept of well-ordering has the potential to be most useful when patient cases are prioritized iteratively. When applied to potential organ resource recipients grouped accordingly, because well-ordering implies that there is always a least element, it could facilitate the process of allocation by considering the needs of, risks to, and benefits derived from the receipt of the resource for members with life-threatening health conditions such as those requiring organ transplantation. As a result, decisions relating to the allocation of healthcare resources have been inevitable, either between different competing services and interventions (i.e., priority setting) or across different patients (i.e., rationing). Among the most troubling issues that plague any effort at prioritization and ultimately rationing, in my opinion, are the arbitrary cutoff points that delineate those who qualify from those who do not. That is, in the best possible scenario in which well-ordering has been implemented once needs, risks, and benefits have been considered in the equation, whatever number candidates receive for prioritization, or the variables used to calculate one, had to have been decided upon by someone. Nonetheless, that decision may have been otherwise and would have altered the sequences if a different individual assumed the lowest number. The implication is that the reasoning behind one particular number or cutoff can be considered vague.

Black (1937) defines the vagueness of a term as it relates to the existence of objects [in the term's field of application] concerning which it is intrinsically impossible to say either that the [term] in question does or does not apply. Thus, with a vague predicate such as "rich" or "fat" or "beneficial" or "risky," it can be argued that a slight change in risk or benefit cannot make or break the fact that a candidate benefits or changes risk status. Unfortunately, an argument that initially appears valid leads to a contradiction in the form of the Sorites Paradox. The paradox results from accepting the premise that a minuscule incremental change (+/-) cannot make or break the predicative truth status. However, after many increments, ultimately one is led into an obvious contradiction in the conclusion (Facts and Myths about Transplants, 2010).

Framing the Problem of Resource Allocation

Prioritization and healthcare resource allocation may be framed in a variety of ways. For instance, it could be framed from the perspective of the patients' rights, which, according to Gillon & Gillon (1985), may be considered "justified claims that require action or restraint from others (p. 1890)." Nevertheless, if it is granted that one does have rights, then through the requirement of others to act or refrain from acting, it may be inferred that others must have a duty or obligation (i.e., deontology). Also, the perspective of right conduct (i.e., morality) may serve as a reasonable framework. That notwithstanding, from the standpoint of what the patient can reasonably look forward to or expect, prospect theory may also be a viable choice to consider. Moreover, the issue could be addressed from the viewpoint of getting what one deserves under the rubric of justice. Regardless of the perspective from which the problem may be framed, whether from one of rights, deontology, morality, prospect, or justice, there always exists some degree of overlap, which I may exploit.

It seems as though, given the interrelatedness between the previously mentioned perspectives, a reasonable foundation for any issue of this nature would be Aristotle's formal principle of justice (Golan, 2010). Aristotle makes the distinction between two forms of justice: that in the general sense and that in the particular sense. The primary difference is that when expressed in relation to other people, one type is considered general justice, whereas distributive justice in relation to merit and worth relates to particular justice (Aristotelian ethics, n.d.). Specifically, Aristotle's formal principle of justice claims the following: "Equals should be treated equally; unequals should be treated unequally, in proportion to the relevant inequality."

The failure to share one's responsibility may be interpreted as a relative inequality that could be useful in the prioritization of patients in need of a healthcare resource. Such an inequality may substantiate "unequal treatment in proportion to the relevant inequality," according to Aristotle's formal principle of justice (Golan, 2010). Concerning this position, the unequal treatment could be that those with substance use histories would be given lower priority than the other potential resource recipients to whom the organs could be allocated.

It would be difficult to consider substance users as "unequal" and their self-injurious behavior as the relative inequality. A determination on how to consistently treat these potential recipients in proportion to such presumptive inequities would be difficult at best. The difficulty to which I refer is the involvement of multiple factors, which include both heritable and environmental factors, which contribute to the outcome of substance abuse and addiction, regardless of the perspective

from which the process of determination could be viewed. In addition, or more importantly, if Aristotle's aphorism is to be interpreted as that which is handed out in proportion to merit (Johnson & Jordan, 2018), the reader ought to seriously consider who determines what merits the receipt of organ donation and how they ought to go about determining so.

Approaching from a Standpoint of Logical Consistency

Of the views available from which to address the issue of the present paper, it ought to be acknowledged that there does exist an aspect common to all: logical consistency. The reason that it can be argued that logical consistency should be understood as fundamental to all views is that, regardless of the framework from within which one chooses to address healthcare resource allocation and lower priority setting, whatever principles are peculiar to each perspective must be internally consistent. Furthermore, with the existence of such internal consistency, once overlap and interrelatedness are considered, it may become possible to conceive of unifying the strengths of any one framework with those of the others. It is this potential for uncertainty that could ultimately be most fruitful with regard to any significant progress being made toward a solution.

To understand how one viewpoint leads to others, suppose duties or moral obligations are the starting framework. It is acknowledged that duties, or moral obligations, are the domain of deontology (Gillon & Gillon, 1985). The question that arises when deontological aspects are considered, however, concerns what it is about the duty or obligation that allows it to be situated within the province of morality, or "right conduct." In other words, are duties or obligations moral due to some constitutional principle of justice that inheres within them, or is morality a consequence of others acknowledging one's justified claims (i.e., rights)?

Alternatively, perhaps it is the prospect of one's justified claims being legitimized by the duty that others feel that makes fulfillment a moral obligation. Nonetheless, if this were the case, then "right conduct" would be about expectations being based on getting what one deserves, which would relegate the issue to the realm of justice. It is evident that they are all valid and interrelated points that should be explored. However, they are exceedingly complex and may not necessarily be required to provide answers to address the problem.

On the other hand, starting with a moral question within the framework of rights, the issue of healthcare resource allocation and substance users concerns whether and how much one's role in choosing to engage in self-injurious behavior resulting in a health condition should be considered in determining the individual's priority (Golan, 2010). That is, whether one has the right to receive treatment when one is the cause for the treatment to be needed.

Also, what about the provision of treatment in instances of self-inflicted harm that would render it "right conduct?" Moreover, the moral standpoint entails questions concerning deontological aspects of the issue because granting certain moral rights may be understood to imply the existence of duties or obligations (Gillon & Gillon, 1985). In other words, the duties and obligations would satisfy the "right conduct" clause to be considered moral obligations.

Furthermore, employing a moral approach to the problem of healthcare resource allocation entails some notion of justice as well. That is, as a principle, getting what one deserves in the case

of people with self-inflicted conditions, such as those from the use of both licit and illicit substances, emphasizes how important what one does is to what another ought to do for them and why this may be the case.

Even with the guidance of NOTA and UNOS as the OPTN, implementing an equitable priority setting and resource allocation (PSRA) program is an extraordinarily complex task for healthcare organizations. As such, to approach the problem solely from any single framework would be insufficient at best. In other words, the fair allocation of healthcare resources should not just concern substance users' rights, nor should it be about the principle of justice associated with getting what one deserves. Furthermore, righteousness should not be appealed to by itself because the allocation of organs as healthcare resources for substance users is not only about engaging in moral or "right conduct" on the part of healthcare personnel on transplant committees. For that matter, the allocation of organs as healthcare resources may not just be about the duty or obligation imposed on healthcare staff or society. Moreover, distribution of these resources can no more be about the prospect of receiving an organ and having expectations fall short than it could be about judgment and bias dictating whether expectations substance users have for organ transplant should be met. There must be consideration given to the multidimensional nature of the issue at hand.

It has been shown that there are many aspects of the problem from which the evaluation may begin. Although vital to consider regarding the topic of substance users and organ allocation because any of the individual perspectives is comprised of more than consistency, each may be sufficient to frame the issue without being necessary to do so. For this reason, a somewhat different approach has been attempted. Thus, this work is not approaching resource allocation from the traditional framework of arguing on the basis of consequences or obligations for their own sake; it will address equitable resource allocation and substance users from a framework of logical consistency as the fundamental guiding principle. The employment of such a framework will allow the determination of whether this is indeed an issue concerning substance use as a relevant inequality.

The Role of Intention and Personal Responsibility

There may be no straightforward way to demarcate issues of concern for medical justice from those of societal justice. That is, being deserving with respect to medical treatment may implicate social responsibilities or obligations. So, if a substance user has the right to organ allocation for transplantation, they may not be able to afford it themselves although society can afford it, which could mean that society has a duty to subsidize their treatment. Nonetheless, if it may be demonstrated that the individual has relinquished or otherwise lost membership from society, then that obligation no longer exists. The problem is determining what it would take to convincingly prove someone has acted or behaved in such a way as to forfeit their membership. More importantly, even if such behavior could be proven, how might one show that engaging in such action or behavior was a free choice?

There is a tendency to assume that individuals behaving in a non-meritorious manner choose actions of their own volition. In fact, this tendency is captured in the theory of attribution bias. According to the theory, there is a tendency for people to overemphasize and attribute the actions of others, or lack thereof, to dispositional factors from an etic perspective (Fundamental Attribution

Error, n.d.). Moreover, people tend to undervalue dispositional factors as explanations for their own behaviors (Jones & Nisbett, 1971). The problem is that having a certain disposition toward engaging in something does not preclude the possibility of there being an underlying genetic basis for it. Thus, patients with known substance use are unjustly assumed to make dispositional choices voluntarily when they may not be entirely responsible for their lack of success in kicking their habit.

Success is a combination of both internal and external factors, which are dispositional and situational, respectively, that precede success as an outcome when it occurs. Although I acknowledge the risk of an apparent tendency to attribute undesirable behaviors or outcomes in others to their disposition, whereas when recognized in ourselves, such behavior is attributed to a particular situation, without precision in controlling experimental conditions as situations, there may be no adequate way to determine —whether successful or not quitting substance use—how much may be accounted for by one's disposition versus their situation. Thus, the reasons for successes and failures may be seriously questioned as it relates to exercising volition. Volition as freedom of choice to engage in behaviors may seem obvious when, in fact, it results from a combination of genetics and environmental circumstances. Under the assumption that free will exists, given the potential confounders of genetics and environment, it may prove more beneficial to consider another aspect implicit in the notion of freedom from the perspective of substance use as a form of self-inflicted injury: intentionality.

Intention has been defined in many ways. While for some cognitivists, intention has been said to be identified with belief that one will do something, non-cognitivists have described it in terms of conation in the absence of belief. Now, my understanding of propositional attitude is that it is a cognitive relation that a mind or person bears to a proposition (Nelson, 2019). For instance, x 'believes," 'hopes,' "wants," or 'knows," when adjoined with 'that," followed by a propositional clause, would be a sentence describing a propositional attitude. So, whether intention is identified with the phrase "I believe that I will do x" or " I want to do x," both are propositional attitudes, only differing in the verb used.

Various papers offer different perspectives on the nature of intention. Percival (2014) argues that intention is a primitive and irreducible mental state that aims at self-control, while Pacherie (2009) proposes a dynamic theory of intentions that distinguishes between different forms of intentions based on their functional roles and contents. O'Hagan (2001) discusses Michael Bratman's planning theory of intention, which sees intentions as elements of stable, partial plans of action concerning present and future conduct. Uithol (2014) challenges the notion of intention as a discrete mental state and suggests that the processes underlying intentional action are more dynamic and context-sensitive than the concept of intention allows for. Overall, the papers suggest that intention is a complex and multifaceted phenomenon that requires further investigation and refinement of theoretical frameworks.

It may be assumed that self-inflicted harm, as a free choice, is the intention of an individual engaging in certain behaviors. However, self-inflicted injury as a free choice need not be the intention of an individual. That intention may have existed related to harming oneself, but it does not necessarily correlate with the outcomes of actions either. For instance, suppose that an individual was trying to save someone's life. The intention to save someone's life was made known immediately before acting. While it is possible that this person may have intended to save another's

life, in the act of performing CPR on this individual, they break a rib that punctures the heart. As a result of the fractured bone, the person subsequently dies. It may be gleaned from the events in this situation that what was intended was not the outcome, even though the intention was attempted to be carried out through the action. Every action was backed by intention in the hypothetical scenario, yet the outcome was not what was intended. At what point does intention become the warrant that substantiates the claim of action as a causal link in the chain of events leading to a direct outcome?

Aside from the outcome of harm or death being distinct from the act of self-infliction that preceded it and beyond one's control, just because one may be responsible for the injury sustained in no way implies that they desired or intended it to be. Some distinctions may be made between intention, action, causation, and outcomes; they are all interrelated, but they do not necessarily implicate one another. If one intends to do something, then they do that something, but it is not the case that if they do something, then they intended to do it. The action performed and the intention itself are separate from one another. While they may coincide with one another, the expressed intention to act and the commission of the act intended themselves do not necessarily coordinate with one another. For instance, the act of swinging a stick blindfolded with the intention of breaking a piñata may result in the commission of the act of hitting someone instead; thus, what was intended (i.e., hitting a piñata) was not what resulted (i.e., hitting a person). In this manner, there is at least one case where the intention, the commission of the act, and the outcome of the commission are seen to be separate.

It is possible to be responsible for doing something one intended to do that was the proximate cause of a result that one did not intend. The intention may not be translated into the occurrence of an outcome, regardless of its proximity. Concerning self-injurious behavior, self-inflicted harm, or death that occurs, this is an outcome on which one's intentions may have no influence; one's intention only influences one's action or behavior but not its consequences or outcomes.

If one has the intention of doing something and does it, then that action is the one that was intended to be done. Important to inquire about is whether one may intend to do something for which there is no plausible way to do it. In other words, could a person with no legs truly intend to play hopscotch? Alternatively, is it the case that intentions must entail possibility, if even remote? Yes. One claims to intend on walking to the store, which necessitates the ability to walk. Otherwise, to speak of intentions would be meaningless. One role of intention should be to establish what is possible. In other words, intention does not only mean that something is the case, but that something *can be* the case.

To qualify as intentions, what is claimed as such must allow one to infer that what is intended is indeed within the realm of possibility of the one claiming it. There are at least two perspectives on the situation concerning possibility. From one perspective, an ability exists, but its limits are insufficient to meet expectations. From another, there is an absence of ability because it does not exist. In the case of an ability being present yet insufficient, if there is a five-foot-tall brick wall that someone claims to intend jumping over, yet they can only jump four feet despite having the ability to perform the act, one could not claim jumping the five-foot-tall wall as their intention. Although jumping over a wall is possible, the ability to perform the act is insufficient to consequentially succeed in doing it. In the case of the absence of ability, a person who claims to have the intention of playing hopscotch must have legs; otherwise, doing so is not within the realm of possibility for them either. Therefore, the ability to perform an action is necessary yet

insufficient to determine what is possible because, even in the presence of ability, what is possible is contingent on the potential to successfully meet the demands of the act.

Another aspect of intention implicit in possibility is control. While having legs is a requisite to engaging in any activity that involves them, the possession of legs alone is insufficient to do so; one needs to be able to transition from not using the legs to using them for a particular purpose. The ability to use one's legs for a particular purpose requires control of them. For instance, both the lower limb double-amputee without legs (therefore, without control of their legs) and the person with paraplegia who has legs over which there is no control are unable to intend to engage in activities such as hopscotch. Moreover, if it is true that the intention to play hopscotch requires the possibility to do so, the possession of legs, and control of what is in one's possession, then the intentions claimed also require the first-person perspective. That is, it is never the case, nor is it possible, that one may legitimately claim intentions from any other person's perspective. Furthermore, one may not "intend for somebody to …" since this would violate perspective as well. In other words, someone may intend something, or someone may intend for something, but never can one intend somebody or intend for somebody.

It is the person from whose perspective the intention originates that matters. There cannot be a way to intend anything from an alternate view that is beyond the control of the one intending. Thus, the following may be concluded: (1) intention requires general possibility; (2) intention seems to concern the ability for specific actions to occur; (3) intention requires possession of means needed for the ability; (4) intention implies control of what is possessed; and (5) intention requires the first-person perspective and performance of the one claiming the intention. Based on propositions 1 through 5, intentions, therefore, imply actions of some sort but do not necessarily imply consequences. That is, intentions allow us to distinguish what I refer to as veridical actions that are *causes* from "pseudo-actions" that are misconstrued as *possible effects*. For instance, if one were to intend to kill another, they would need to be able and capable of performing some veridical action such as firing a weapon or wielding a sword that is the cause of the death of the other person as a consequence. Moreover, it is always the case that *what was done* killed the other person and *not the doer* directly.

In the case of blaming substance users for getting liver failure that requires organ transplantation, consuming alcohol would need to be the true action, and liver disease would need to be the consequence that always occurs. Together, the true action and the specific consequence result in liver failure, which would then legitimize alcohol consumption as the true action. Nevertheless, this does not mean that one intended to get liver failure.

Although not an action, one's intention may be transitively related to the outcome only until the point of completion of the action, serving as a temporal precursor but not necessarily its cause. This finding is vital to the present paper and places substance users' actions in the context of individual behavior as a generic cause without claiming an outcome is directly consequential. That is, substance user behavior can be considered veridical action and may even be said to be an action that they intended. Nevertheless, intentions, actions, and outcomes are distinct. Intentions are associated with real action. However, getting alcoholic liver disease (ALD) requiring a transplant subsequent to substance use behavior is either (1) not the effect or intention of the user's actions or (2) the effect of the action but has a genetic basis. Furthermore, for substance users needing organ transplantation, the health condition that they developed after engaging in their addiction

behavior might have occurred without their conduct; therefore, there is no way to establish it as a direct consequence even if they intended to behave the same way, acutely aware of the possible sequelae.

Organ resource allocation and prioritization

The argument for, and approach to, a standardized prioritization protocol is quite problematic despite the obvious need for prioritization. As it presently stands, there is no universally accepted or adopted standard for prioritization, as mentioned previously. The lack of such a standard has led to idiosyncratic tendencies when it comes to prioritization that result in the inconsistent and biased outcomes observed in candidate selection practices.

The basis for the need to standardize prioritization for resource allocation lies in the reality of the vital organ supply constraints that healthcare organizations face. Because of such constraints, hospitals have been forced to evaluate potential organ transplant candidates to determine who will receive the treatment and on what basis. The evaluation process raises many issues associated with medical history, including those concerning patient substance use and addiction.

Given that there is evidence to suggest that there may be a heritable predisposition to substance dependence or addiction (Sora, 2014), it is reasonable for someone so predisposed to be more likely to become addicted and have difficulty stopping. Despite the evidence, there are the lower prioritists who would claim that, because of alcoholic liver disease (ALD), as an example, a current or former addict being considered for organ transplant has not done enough to address their health (i.e., tried hard enough to stop drinking) to deserve equal priority to a non-user. However, this is not necessarily the case.

Since having ALD because of substance addiction does not reveal the steps taken to stop drinking, there is no way to know whether this person did or did not do enough; a lack of success does not imply a lack of effort. Furthermore, the non-user who presumably needs a liver transplant unrelated to actions that involved taking substances has not done anything to address his health issue because they could not; there is no way to know whether it was within their control, so they knew nothing that they could have done would have been directed toward affecting the development of the disease condition.

Substance use and addiction to alcohol, narcotics, and nicotine, among other drugs, have been shown in twin studies to be influenced by genetics by up to 50% (NIDA, 2016). Thus, to become addicted or to successfully quit once usage has begun might be dependent on one's genetic susceptibility, which then could signify unfair advantages or disadvantages. Furthermore, I argue that regardless of whether those in charge of resource allocation choose to acknowledge the existence of predispositions to use and addiction, there will exist an unspoken systematic bias against those with substance histories.

According to the personal responsibility narrative, one of two scenarios could occur for those with histories: either an addict could do enough or could not do enough to address their health condition by quitting. If a substance user could do enough, for instance, even if a liver transplant were still needed, then they would need to do more than an individual without a history of substance

use in order to succeed in their effort to quit because they are the only ones who would be required to do so. In fact, whether genetic predisposition exists is irrelevant at this point; if it is present in an addict, then they work hardest, and if it is absent, they may work less than someone who is genetically predisposed but still need to do more than someone who is not addicted, regardless of that person's genetic status. Most importantly, to quit using the substance, irrespective of gene status, someone with a history may engage in any number of actions that are insufficient to achieve the desired goal of recovery. Thus, it is possible that no amount of action taken by an addict could override an individual's propensity to remain an addict regardless of genetic predisposition.

Just in case a substance user could not do enough, then possibly they have not done anything because they cannot. Perhaps the reason they cannot do enough is due to addiction or genes, or they have tried everything incessantly, whether genetically predisposed or not to addiction, but to no avail. Important to note is that if an individual has not done anything, then they would at least be doing as much as the non-user (i.e., nothing). Conversely, if someone has tried everything, trying incessantly to quit to no avail, then, whether genetically predisposed or not as an addict (assuming a distinction could be made), they would be doing more than a non-user. This would mean that an addict would either do the same as the non-user did by doing nothing, or they would do more than the non-user did, regardless of whether the addict could do enough to quit successfully or could not do enough and failed miserably. Therefore, if priority is being based on merit by "doing enough," and I have just established that non-users in need of a transplant have not had to do anything, then addicts should at the very least get the same priority status as non-addicts because there is no way for those with substance histories to do less than non-addict candidates.

An argument in support of addicts being given preference based on merit exists since, in theory, whether genetically predisposed or not, addicts or former addicts may give more effort and be just as unsuccessful as if they had not given any to begin with. Because of this, as counterintuitive as it may be for the reader, there is justification for addicts getting higher priority status since the absence of success does not imply the absence of effort. In this respect, it is asserted that substance users should not be automatically demoted to lower priority status for failing to take personal responsibility for their health in a meritocratic fashion, but according to the condition of moral responsibility obliging one to do enough by giving their effort, the prioritization could justifiably be given to those with substance use histories because it is possible for them to have put forth more effort than nonaddicts despite their lack of success. Despite the need for prioritization, lower priority practice targeting candidates with known SUD is flawed in that it is possible for someone to effectively be penalized for a lack of success despite being at least equally desirous of organ resource allocation based on efforts to contribute to their health.

Summary

While lower priority setting may be substantiated on occasion, exactly under which circumstances it may be so is still open to discussion. The argument in support of prioritization, which has traditionally been based on personal responsibility narratives, falls short of substantiating its purpose. In an effort to address the problem of equitable distribution in healthcare resource allocation, attempting to hold people personally accountable fails to acknowledge the role genetics plays in responsibility for one's actions. Essentially, doing so amounts to making people responsible for their genetics, and implementing such a policy does nothing to address the

underlying issues facing resource allocation, which include evidence-based decision-making, consistency, fairness, and a lack of bias. How one may feel justified in using something over which one may have either incomplete or no control (i.e., personal decision-making and choices) to determine the pool of potential candidates from which to choose and ultimately those candidates who will be recipients of organ resources is certainly up for debate. Unless and until a proportion of personal control has been successfully mapped genetically, personal responsibility ought not to guide decision-making in candidate selection.

Such a practice of relying on questionable levels of personal responsibility would be tantamount to a pseudo-meritocracy. That is to say, as opposed to a legitimate meritocratic society, this would be one in which anyone who deserves to receive an organ and the chance to live would be based on the ability to earn the organ and chance to live that is undermined by one's genetic makeup. In no significant way would such a practice differ from other forms of selection bias or preferential treatment that are based on a person's genotypic or phenotypic presentation or characteristics. Additionally, not only does such a practice fail to be truly meritocratic, but such a failure calls into question the determination of personal responsibility. In other words, although the manifestation of motivation or effort can be determined to have occurred and potentially evaluated through actions and behaviors, given the established relationship between the genetics of dopamine receptors and the association between the density of dopamine D2 receptors and dysregulation of motivation (Trifilieff et al., 2013), accountability becomes very complicated, if possible at all.

Considering the potential for genetics to influence motivation and effort, I must consider the possibility that conditions such as obesity, ADHD, and addiction cannot simply result from lapses of personal responsibility, which means that perhaps substance users ought not be held responsible for not doing enough to address their health. Furthermore, not sharing responsibility by failing to do enough (i.e., the negation of action) does not necessarily imply that the lack of substance users' success results from a lack of effort. Given that a lack of effort cannot be reasonably inferred from a lack of success, as well as the existence of factors otherwise beyond one's control such as genetics and environment, substance users should be given equal or higher priority than non-users. Those with substance use histories should be given equal or higher priority because, in spite of their genetics, either they may have done as much as non-users to address their health, or they may have done more than non-users to address their health regardless of their level of success.

It was useful to ponder the way a utopian society would resolve ethical issues related to healthcare resource allocation because there was no need to consider the quantity of available resources. Such limitless supplies reinforced an approach to distributing resources that was both sensitive and specific. That is, concerning the demands of the members of any society, to efficiently meet the needs, resources ought to be disbursed only to people who have a need and may benefit from receipt. Moreover, a specific approach to allocation would ensure that those without a need or who could not benefit from receiving them did not get them.

To facilitate the allocation of resources, prioritization must occur beforehand. Priority setting as sequencing was likened to a principle of well-ordering in which there was always a least or lowest element. As applied to society, well-ordering would help to establish who would receive resources first based on needs, risks, and benefits. Setting the order of priority depends on other factors, such as those considered personological. Personological factors like substance use, however, could lead to obstacles in setting the order.

The challenges faced are related to figuring out the best manner in which to frame the problem of the distribution of organs as healthcare resources. Nonetheless, irrespective of the standpoint from which the problem is framed, whether rights, deontology, morality, prospect theory, or that of justice, there is always a certain amount of interdependence and overlap.

Although Aristotle's Formal Principle of Justice has been chosen by some to be a starting point for issues relating to ethics, framing substance users as the unequal and their substance use as the self-inflicted harm that is the relative inequality may not be the most appropriate approach. Interpreting substance usage as relative inequality to determine proportional treatment according to such inequities invites many difficult challenges, no matter the perspective ultimately selected.

As opposed to relying on Aristotle's principle, arguing on the basis of consequences or obligations, or any of the other traditional frameworks for approach, it was suggested that a principle of logical consistency guide the approach. The suggestion was based on the exceedingly complex nature of the other approaches, any of which may have been sufficient without being necessary. The term "complexity" refers to the other aspects of the particular framework beyond the foundational element serving as the philosophical binder. As a philosophical binder, that foundational aspect was logical consistency. Each framework was logically consistent as a distinct philosophy, yet it was shown that any one of the perspectives includes aspects that can be derived from another of them. Such interrelatedness among the perspectives implied the existence of a commonality. Moreover, as a commonality, it was logical consistency that was thought to allow capitalization on the strengths of the perspectives while also compensating for the individual weaknesses.

The notion of deserving consideration for transplantation as a member of society as it pertains to substance users receiving organs as healthcare resources to be distributed for medical treatment may require that they have upheld their end of any social responsibilities or obligations that exist. However, the duties or responsibilities that society may have toward substance users would only exist as long as they maintained their membership status. Some might argue that membership ought to be based on personal responsibility and taking potentially self-and-nonself-injurious risks like using substances voids that membership.

According to some, substance users freely choose to engage in behavior that causes the conditions for which organ transplantation is required. From the viewpoint of self-injurious behaviors, implicit in the presumption of freedom to harm oneself is that an act or behavior is intentional. Nonetheless, it was pointed out that the outcome of injury or death subsequent to a self-inflicted injury is distinct from the self-injurious behavior that preceded it. Furthermore, although the result itself was shown to be beyond one's control, even when an individual may be held responsible for the action that led to an injury sustained, it is not necessarily the case that they intended the action or the outcome. It was, therefore, concluded that while they may coincide at times, intentions, acts, and outcomes were, in fact, distinct from one another. In addition, actions committed may or may not be causes, but as causes, they may or may not be associated with specific outcomes. That is, intention, action, causation, and outcome, as the chain of events is interrelated yet independent.

It was inquired as to whether one may really intend to do something that one knows is not plausible. The argument that was provided led to the conclusion that one's claiming to have the

intention of walking necessitates the presence of their ability to do so (strong sense), or at least the absence of the inability (weak sense), in order to avoid meaninglessness. Intention has the primary purpose of either establishing what is possible or allowing the inference of what lies within the realm of possibility of the individual claiming to have the intention. It is possible to be responsible for doing something one intended to do that was the proximate cause of a result that one did not intend. The intention may not be translated into the occurrence of an outcome, regardless of its proximity. Concerning self-injurious behavior, self-inflicted harm, or death, that it occurs may be an outcome over which one's intentions have no influence; one's intention only affects their actions or behavior. Thus, neither consequences nor outcomes after one's actions or behaviors may be directly influenced by one's intentions.

Conclusion

Advancements in medical science and technology continue to expand healthcare possibilities for all people, including those with substance histories. For organ transplant candidates with a history of substance use who receive an organ transplant, only a small percentage relapse into their substance use habits. Unfortunately, though, candidates with such pasts are routinely denied the opportunity by transplant committees and healthcare personnel responsible for decisions.

While many factors are involved in the decision-making process, a determination of the overall value of the potential patient is implicit in their denial and includes impression judgments. Impression judgments rely on a person's perception and may be subject to biases such as those based on appearances, characteristics of actions, or their motives. Because impression judgments are made through a subjective lens, without well-established criteria, there may be various interpretations associated with person perception by the committees and healthcare providers involved in qualifying candidates. It is the potential bias due to individual perception that could at least partially explain the disparaging attitudes toward potential organ transplant recipients with substance use histories.

Individuals in need of organ transplantation with substance use histories are often very motivated and may serve as sources of inspiration. In addition, they could provide a unique perspective, having experienced the effects firsthand. That is, these people are in a unique position because they are the only ones who can provide society with what they have to offer, which makes them valuable members of society. Moreover, they may play a significant role in society that allows their practical wisdom to be utilized for a purpose.

Whether a potential recipient suffers from liver failure as a result of alcohol use, through the sharing of hypodermic needles to satisfy substance habits, or contracted hepatitis from a tattooing instrument that precipitated organ failure unrelated to any substance use history at all, organ transplant recipients have the potential to contribute to society by preventing others from making the same costly errors in judgment that they have made themselves. Furthermore, the potential contributions that they may make could significantly affect or improve the lives of all members by preventing others from experiencing hardship and tragedy themselves or being the ones newly responsible for causing hardship to others.

Despite legislation passed in seven states to ensure full consideration for substance users, there are still problems concerning equitable treatment and a lack of consistency in uniform and enforceable policy regarding the conditions in which organ transplantation is safe and acceptable. Furthermore, according to the evidence-based literature, studies concerning substance users returning to drug habits and how that may impact the transplant recipient's success are not unequivocal. Consequently, the use of marijuana should be taken under advisement but should not preclude qualification for organ transplantation.

Studies concerning aspergillosis infections have been associated with the use of contaminated marijuana. Nevertheless, even if, in the absence of contaminated marijuana, infections were to increase, there could be other factors explicating aspergillosis development. One such factor is being neutropenic, which occurs in various contexts and reduces immune defenses. Since neutropenia has been recognized as the key factor in developing aspergillosis, the immunocompromised state transplant recipients must endure as part of the process itself could increase the occurrence of infections. Does this mean that because getting transplanted organs increases the risk of aspergillosis infection due to being immune compromised for some time, no one should get surgery? Of course, it does not. Thus, even if marijuana were to increase the risk of infection, it makes sense to manage the risk and get the surgery if needed, which is what ought to be done.

Increased aspergillosis infections could be due to being exposed to the nosocomial environment or related to the site of infection in the lungs. That notwithstanding, there is insufficient justification to deny patients based on the extant literature. One option could be making services available that may be included in the qualification as a contingency for patients at risk that could provide education about the concerns associated with the use of substances related to contamination from nonregulated distributors.

While ALD and Hepatitis C are the commonest causes of needing organ transplants and are associated with the use of substances, assigning lower priority based on substance use histories may be unjustly penalizing people for genetics and environmental factors that are beyond their control. Furthermore, lower priority, as a position, was demonstrated to be untenable. In addition, a merit-based system of moral responsibility used in assigning such status was also determined to be irrational. The main benefit of meritorious systems rests on the choice one has in behavioral commitments. Nonetheless, having the ability to choose and being aware of the consequences was shown to nullify the freedom apparent in any supposedly meritorious acts. That is, whether a priori or a posteriori, freedom is indeterminable due to primacy effects. If a priori people are free to choose and learn afterward they did not choose what is deemed meritorious, then they are effectively penalized for not having been themselves given the courtesy of choice. However, even if given the choice a posteriori and people choose the behavior knowing it is the one linked with merit, the only meritorious behavior for which they are rewarded is obedience because they cannot be said to have freely chosen.

Research has demonstrated that genetics can influence our behavioral tendencies (i.e., using or abusing) as well as our success in engaging in certain types of behavior (i.e., consuming substances). Given that such influences have the potential to sabotage attempts to avoid or cease using substances like alcohol or marijuana, to deny former users organ transplantation due to their needing it as a result of developing a disease due to substance use is not necessarily just. Transplant

committees and the healthcare providers that are responsible for such disparate allocation practices should understand that a lack of success in no way implies a lack of effort.

The potential candidates have been made to abstain from substance use for a particular length of time because they alone, through lifestyle choices, are being held responsible for their condition, despite the evidence suggesting that heritable factors are involved. Moreover, patients are deemed less deserving of organ transplantation due to their current or past substance use. As a result of their substance histories, they are being denied.

Many providers base their decisions to deny transplants to people using marijuana on the belief that its use after transplantation leads to increased morbidity and mortality. Moreover, the mental effects of marijuana use may potentially lead to poor judgment and noncompliance that is related to cannabis induced transient psychosis (Arseneault, Cannon, Witton, & Murray, 2004), which could jeopardize the success of the procedure. Nonetheless, transplantation has been shown to be successful in people who have substance use histories. In fact, individuals with substance use histories who have received solid organ transplants have a relatively low rate of relapse for alcohol, tobacco, and illicit substance use within any given year following transplantation (Facts and Myths about Transplants, 2010). Thus, a relatively small percentage of substance users encounter issues when given the chance to receive an organ transplant.

Considering the evidence in the literature, there appears to be no research-supported basis for routinely denying substance users full consideration for organ transplantation. Such disparaging behavior toward those in need of transplants is not substantiated. Despite the preconceptions that one may have regarding people with past or present substance use histories being responsible for compromising the success of a transplant procedure, the potential risk posed by the consumption of substances can and does occur even without their use, as is the case for marijuana. When the risk exists in the absence of one's behavior or choice, the behavior or choices that share the same risk cannot justifiably be used to deny one's candidacy in an equitable manner.

Risk affects all of us and can occur as a result of our actions or behavioral choices. However, when the existence of a risk is unrelated to what one does, whether one's genetic makeup predisposes them to illness, substance use, or morbid obesity leading to the need for organ transplantation, sometimes there is nothing that can be done to alter its existence due to situational circumstances beyond one's control. For those individuals who need an organ transplant partly due to being predisposed genetically, environmentally, or otherwise, instead of being disqualified for candidacy, some form of contingency ought to be instituted.

Participation in educational interventions to satisfactorily meet the contingency requirement—regardless of how brief due to time constraints—would be encouraging. Programs developed like the one herein suggested will work with candidates with known substance use histories both before, during, and after transplantation to facilitate reentry into society. Although not everyone will succeed in such a program, since a lack of success does not imply a lack of effort, the data obtained from having implemented such a program can provide adequate information to prompt further research into the nature of substance use, furthering our understanding.

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