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Bolstering the epistemic argument against desert-based medical resource allocation

ABSTRACT:

The proper distribution of scarce medical resources is a heavily debated topic in medical ethics. Some have argued that allocation strategies should sometimes incorporate whether a particular health need is likely a result of an individual's own voluntary choices. One reason to include this variable in resource triage decisions is that individuals who acquired a medical need as the result of their voluntary choices may appear more responsible for their condition, and thus less deserving of treatment than patients who were simply unlucky in developing their medical need. One argument against this position is the epistemic argument, which points out challenges in determining desert. In this article, I build upon recent work on the epistemic argument by reducing its assumptions and developing a robust defense of its most crucial premise. After considering some counterarguments, I conclude that while the epistemic argument is successful in casting significant doubt on justice motivations for considering patients' voluntary choices in resource allocation, utilitarian motivations for this position deserve further study.

I. INTRODUCTION

Demand for medical resources, such as transplant organs, often greatly exceeds supply. In such cases, medical professionals face difficult ethical decisions regarding allocating those scarce resources. Decision makers often weigh different features of patients to determine treatment order. Features often considered include severity of symptoms, prospects of recovery, and waiting time, among others.

One controversial feature that some have discussed the ethics of using in allocation decisions is whether an individual's voluntary choices, such as to remain unvaccinated, likely resulted in their health need.[1] In such cases, an individual may appear responsible for their health need, where responsibility is understood as an individual having "causal control over the events that led to the medical condition."[2] Since, during the height of the COVID-19 pandemic, many clinicians experienced moral outrage at the number of voluntarily unvaccinated patients consuming limited medical resources that others could not receive as a result, the pandemic will serve as an illustrative example in this article.[3-4] A 2021 survey of doctors in Norway revealed that a substantial minority of them supported the use of patients' lifestyle choices as a priority criterion in care allocation.[5] Surveys show that many in the general public also support incorporating individuals' responsibility into allocation decisions. One survey of UK residents found, for example, that in ventilator triage, "(40%) of participants thought that being responsible for contracting the virus should count against a patient, and 44% expressed a similar attitude toward engaging in needlessly risky behaviours."[6] Another 2022 survey found that citizens of Denmark support deprioritizing hospital treatment for patients who deliberately declined COVID-19 vaccination.[7]

There are two main categories of arguments to include responsibility as an allocation criterion. First, there are utilitarian arguments. Among these is the argument that inclusion may serve as a deterrent for choices that might make one responsible for a medical need. Other utilitarian arguments assert that some resources might be better utilized when allocated to patients who are less responsible for their conditions. To the extent that past behavior is predictive of future behavior, an alcoholic who develops Alcohol Related End-Stage Liver Disease (ARESLD), for example, might not steward a transplanted liver as well as one who does not drink alcohol.

The second main category of arguments maintains that it is morally better *ceteris paribus* to allocate resources to those who most deserve them. These arguments are sometimes connected to retributivism, which is a theory of justice holding that one ought to be punished in proportion to what he deserves.[8] This view is also sometimes associated with luck egalitarianism, the view that inequalities due to luck are unjust, but inequalities due to individuals' voluntary choices are sometimes justified.[9-12] These responsibility or desert-based arguments contend that it is most fair to allocate scarce resources to those who were unlucky in acquiring their conditions over those who are responsible for their health needs. Furnham et al. point out that these justice approaches are typically deontological, focusing on the nature of patients' voluntary choices, whereas utilitarian arguments for the same conclusion are teleological, focusing on the consequences of those choices.[13] This article will set aside utilitarian motivations for desert-based allocation and focus entirely on these deontological justice motivations.

One argument against these justice motivations that has received a significant amount of recent attention is the epistemic argument.[14-16] This argument appeals to uncertainties in determining the moral responsibility of patients. Since the responsibility of patients in acquiring

their health needs is difficult to ascertain, it may seem unfair to allocate resources away from them on such grounds. That is because such an approach may inaccurately assess responsibility, and thus risk deprioritizing patients who are not actually less deserving of treatment than other patients. The conclusion of the epistemic argument, then, is that desert-based considerations should not be used in scarce resource triage. While formulations of the epistemic argument vary widely, they typically agree that justly allocating resources away from someone on the basis of that person's blameworthiness requires meeting a high epistemic standard in supporting that person's blameworthiness, that this high epistemic standard cannot be met, and that it is therefore unjust to allocate away from someone on this basis.

II. REDUCING THE EPISTEMIC ARGUMENT'S ASSUMPTIONS

I will formulate a new version of the epistemic argument that seeks to avoid three controversial assumptions that some other formulations make. First, defenses of the epistemic argument sometimes center around objections to the very existence of moral responsibility, or at least moral responsibility as defined in the basic desert sense. The basic desert view of moral responsibility is a backwards looking account holding that "the harm of blame and punishment and the benefit of praise and reward are deserved and fundamentally so."[17] In other words, one deserves blame or praise based on one's past actions. Gregg D. Caruso's epistemic argument appeals to doubts about compatibilism and libertarianism in order to argue against the existence of this kind of moral responsibility.[14] In rejecting basic desert moral responsibility, such approaches unnecessarily rest the epistemic argument on a controversial premise.

The epistemic argument is also sometimes framed as an argument against retributivism, which subjects it to additional criticism.[6] The conclusion of Caruso's epistemic argument, for

example, is that “retributive legal punishment is unjustified and the harms it causes are prima facie seriously wrong.”[14] While this type of epistemic argument may or may not be sound, an epistemic argument applied specifically to scarce resource allocation ethics can, as I will attempt to show, avoid rejecting retributivism outright.

A third assumption sometimes made by formulations of the epistemic argument is that allocating away from someone constitutes a punishment. If that is true, then it may seem that a trial or something like a legal due process should be held to determine a patient’s responsibility in developing a health need.[18] Jeanette Kennett defines punishment as “the imposition of treatment, which is intentionally unwelcome, burdensome, or harsh in response to action or actions undertaken by the target, for which the target is thought to be blameworthy.”[19] Kennett maintains that allocating away from someone on the basis of their supposed responsibility meets this definition of punishment. She then argues that the evidential burden required to justly punish someone is too heavy for health care professionals to meet.[19]

Other ethicists, however, disagree that these sorts of allocation decisions constitute punishment. Chan et al. highlight several possible dissimilarities between resource triage and punishment. First, in triage, when one patient is not chosen, it is necessarily due to another patient being chosen. Second, “punishment expresses blame and condemnation,” but blame and condemnation are not expressed to those placed further down the resource waiting list. Third, punishment inflicts harm, whereas triage includes merely not helping some people.[20]

The epistemic argument can avoid a number of highly disputed issues, then, if it can be formulated in such a way that does not commit to positions on whether basic desert moral responsibility exists, whether retributivism is ever just, or whether allocating away from someone due to their voluntary choices constitutes punishment. Ethicists including Sofia

Jeppsson and Elizabeth Shaw have likewise identified the need to reformulate the epistemic argument to avoid one or more of these controversial assumptions.[15-16] Building on Jeppsson's and Shaw's recognition for an epistemic argument with fewer assumptions, I will construct a new formulation of the epistemic argument that is specific to scarce medical resource allocation. Allocation decisions in healthcare often involve urgent timelines, high stakes, and particularly limited information related to responsibility. Medical professionals are often unable to oversee significant research related to an individual's voluntary choices comparable to what is often conducted in a legal due process. In focusing on the healthcare context rather than on criminal justice or broadly applying the argument to all realms of distributive justice, I aim to present the epistemic argument against desert-based medical resource allocation in its strongest form and with as few controversial assumptions as possible.

III. THE REFORMULATED EPISTEMIC ARGUMENT AND DEFINITIONS

The epistemic argument may be reformulated as follows:

P1: Medical resources should not be allocated on the basis of unreliable information.

P2: Information about patients' comparative desert of medical resources is unreliable.

C: Medical resources should not be allocated on the basis of information about patients' comparative desert of medical resources.

There is not an agreed upon definition of "reliable information."[21] Here I will define reliable information as "information that can be consistently ascertained with at least a moderate probability of accuracy." I define unreliable information, then, as information that fails to meet this standard. By "consistently," I mean that it can be gathered for most of the patients being considered. If there are five patients competing for a kidney, and only one of their ages is known,

then their ages are not known consistently. Regarding "moderate" probability of accuracy, rather than ascribing an exact range of probabilities, I will borrow the categories defined in the Grading of Recommendations Assessment, Development and Evaluation (GRADE) system to rank the quality of clinical evidence. GRADE suggests four categories of evidence quality: high, moderate, low, and very low.[22] In the case of "High" quality evidence, "[f]urther research is very unlikely to change our confidence in the estimate of effect," while further research is "likely to have an important impact on our confidence" in "Moderate" quality evidence, and "very likely" to do so in the case of "Low" quality evidence.[22]

Regarding the term "comparative" in P2, it is important to point out that desert is non-binary. One can be very or only slightly deserving of something, etc.[23] It may be the case that patient A and patient B are both responsible for their health need, but that patient A is more responsible.

As discussed above, by "desert" I mean what Caruso and Pereboom call "basic desert.[17] Some ethicists defend alternative accounts of desert, including forward-looking accounts,[24] but these will not be explored here.

Caruso, Jeppsson, and Shaw agree that a "high epistemic standard" should be met in order to legally punish someone on the basis of their supposed moral responsibility.[14-16] The reformulated epistemic argument applied to medical resource allocation, however, does not maintain that desert-based variables must be known to a higher epistemic standard than other variables in order to be included in medical resource allocation decisions. It treats desert-based variables as just another type of information, and maintains that no information, including information about patients' desert, should be used unless it is reliable.

This reformulated epistemic argument is a practical one in that it focuses on the challenges of obtaining reliable information about patients' comparative desert of medical resources. It is therefore compatible with positions like retributivism and luck egalitarianism, as one could maintain that, in principle, any available reliable information about patients' comparative desert should be used in some allocation decisions, while accepting this argument that this information is not, in fact, reliably available in medical contexts.

The existence of basic desert moral responsibility is sufficient, but not necessary, for the success of P2 in this version of the epistemic argument. This argument is also unaffected if retributivism is true, or if allocation does not constitute punishment. If reliable information about patients' desert was available to hospitals, then it is possible that such information should be used in allocation decisions. The crucial premise of this argument is that such information is not, in fact, reliably available.

IV. DEFENDING PREMISE 1

Medical resource triage has high stakes, and poor triage decisions increase the risk of unfair or harmful results for patients. Triage decisions based on unreliable information are more likely to be poor decisions, and thus more likely to result in unfair or harmful outcomes. If information on prospects of recovery were unreliable, for instance, a heart transplant could be allocated to a patient with minimal prospects of recovery, resulting in the unnecessary death of an untreated patient with high prospects of recovery. Additionally, most factors that typically guide medical resource allocation can be ascertained reliably, making the use of unreliable information not only potentially unjust and harmful, but unnecessarily so. P1 is therefore likely to be the less contentious premise in the reformulated epistemic argument.

One might object to P1 that due to an element of uncertainty undergirding many clinical decisions, other allocation criteria may also be unreliable, yet it would be unreasonable to exclude these other criteria from allocation decisions. Estimates of recovery prospects, for instance, may often prove inaccurate, yet are generally regarded as important variables in resource triage. In response to this objection, I am happy to concede that if any other set of information (e.g. the purported prospects of recovery) for a particular group of patients is indeed unreliable, that this information should not determine the order of patients treated. However, the points raised in the following section may illustrate how reliably ascertaining patients' comparative desert of medical resources may be particularly challenging. It is my understanding that, by contrast, even criteria like broadly categorized prospects of recovery can often be predicted with moderate probability of accuracy.

Another objection to P1 is that there appear to be cases in which even decisions made on the basis of data obtained with low probability of accuracy can be better than randomized decisions. In cases in which all reliable information on patients yields a tie, using information about their comparative desert, even if it is unreliable, might be better than nothing.[25]

Here I will concede that there could theoretically be situations in which using desert as a tie breaker could be justified. However, using more reliable information like age and waiting time would make exact ties exceedingly rare (e.g. two or more patients who meet all of the following conditions: were born on the same day, entered the organ waiting list simultaneously, have equal severity of conditions, equal prospects of recovery, and an equal number of dependents). These cases would not be common enough to warrant investing the resources needed to collect the additional patient data needed to make even a very low probability estimate of desert.

V. DEFENDING PREMISE 2

P2 is likely to be the more controversial of this argument's two premises. In this section, I will very briefly summarize five common points in support of P2 from the medical resource allocation ethics literature. I will then develop a sixth point in support of P2 that deserves more discussion.

First, as discussed above, challenges to the existence of moral responsibility support this premise. If desert in the moral sense does not exist at all, then information about how much of it individuals possess is definitely unreliable.[14]

Second, many different types of voluntary choices can lead to a condition, and not all of these are typically well-documented. Whether someone regularly drinks may be known often, but a highly stressful career may be just as unhealthy, yet less documented.[26]

Third, patients may misreport information to avoid being categorized as less deserving of treatment, especially if they know their supposed moral responsibility is being estimated.[25] The degree of "epistemic authority" that medical professional should grant patients is debated in the context of transplant programs,[27] and there is some evidence that patients underreport alcohol and tobacco use.[28]

Fourth, Alexander Zambrano argues that one would have to show that a patient's voluntary choices not merely led to their condition, but that those choices were not socially valuable. Zambrano uses the example of a firefighter who needs a lung transplant due to excessive exposure to smoke over his career. The firefighter voluntarily made choices that led to his lung condition, but these choices were socially valuable, and thus should not be counted against him. To show that an individual is less deserving of medical treatment, then, one must go

an extra step to show that their behavior was not socially valuable. But it is not self-evident to everyone that actions like smoking are not socially valuable.[2]

Fifth, it is often thought that individuals' degree of moral responsibility for their actions is partially determined by their environments.[29] Moreover, not considering patients' backgrounds as relevant factors in their moral responsibility risks unjustly accentuating existing inequalities. Denise M. Dudzinski lists "immigrants, the uninsured, people with limited English proficiency, etc." as those who may have limited access to vaccinations, while some racial minorities may have vaccine hesitancy due to "the historical trauma of racism."[4]

It is possible that any one of these five reasons could be sufficient to support P2 of the reformulated epistemic argument. If more than one of them is correct, then their cumulative weight will support P2 even more. I will now explore an additional, sixth point in support of P2 that merits further development. That is, that it would be unfair to consider patients' moral responsibility in developing their health needs without also considering other desert-based variables. Responsibility in developing a health need is not the only relevant variable in determining desert of medical resources. Calculating overall comparative desert for medical resources, then, is an even more unrealistic task than determining patients' degree of responsibility for their conditions.

Julian Lamont defines desert as "a three-place relation of the form 'A deserves X in virtue of f' (the desert-basis)." There are many cases in which X in this relation remains constant, but A and f are different. For example, volleyball athlete A may deserve to win a "Player of the Year" award in virtue of performing the best, while volleyball athlete B deserves to win "Player of the Year" in virtue of having worked the hardest, and while C deserves to win in virtue of her charity work. If there can only be one award recipient, the winner in this case is determined by

what the awarding institution values the most, or chooses to make the goal of the award. Lamont observes that people may propose different desert-bases because they have different goals and values.[30]

In the case of scarce medical resource allocation, moral responsibility in developing a health need is just one possible desert-basis. Other desert-based variables include societal contribution, which Chan et al. found enjoys public support as a factor in allocation decisions.[6] Another is reciprocity, which Emanuel and Persad define as "[p]referential allocation of medical resources towards people, communities, or countries who in the past took on burdens to address the current health problem."[31] For example, past organ donors are sometimes prioritized to receive organs themselves, and some hospitals prioritized health care workers to receive ventilators during the COVID-19 pandemic.[32] Individuals' general moral character may be yet another possible desert-basis to consider. It may be that an extremely kind and virtuous person deserves a scarce medical resource more than a cruel, unvirtuous person, even if there is no easily detectable difference in their societal contributions.

Broadening the scope of desert considered may seem unnecessary. Persad and Largent argue that past choices considered in allocation "should be readily verifiable, broadly accessible, and directly linked to the outcome of interest." Considering only these conditions, they argue, will prevent a slippery slope of considering all past choices. They give vaccination status as an example that meets these conditions.[32]

Consider, however, two patients with COVID-19 competing for an ICU bed. Patient A is a kind and virtuous person who was exposed to misinformation about vaccines, and thus was not immunized. Patient B is a racist perpetrator of hate crimes who is planning to commit many more once he recovers. He was required to be vaccinated by his employer, but since being

diagnosed, takes pleasure in coughing on other people in an attempt to spread his infection. Since Patient A's unvaccinated status is due to being misinformed, and Patient B's vaccinated status is due to an external requirement, vaccination status alone reveals little about these two patients' comparative desert of an ICU bed. Once additional desert-bases are considered, it becomes clear that Patient B actually appears less deserving of treatment than Patient A. Considering only vaccination status, in this case, would yield an inaccurate conclusion about these two patients' comparative desert. A just assessment of desert would therefore require a more comprehensive assessment of patients' responsibility in acquiring a health need (rather than using a crude proxy for responsibility like vaccination status), in addition to consideration of other desert-bases like societal contribution, reciprocity, and general moral character. Information about some of these other desert-bases (e.g. Patient B's poor moral character) is not readily verifiable and broadly accessible. Shaw notably discusses a similar case, comparing an unhealthy but altruistic person with a healthy but selfish person.[12] She uses this case to point out that gathering information on all relevant desert-bases would not only be impracticable, but also intrusive.[12, 33-34] Considering only past choices that are readily verifiable and broadly accessible, on the other hand, is likely to result in inaccurate conclusions about patients' desert. Rather than using inaccurate conclusions about patients' desert in allocation decisions, then, the better option for medical professionals is to simply not consider patients' desert in such decisions.

Space permits me to consider one final objection, which seeks to show that information about patients' comparative desert of medical resources can be reliably obtained in at least some cases. Recent work by Julian Savulescu and others has developed the concept of a "golden opportunity" (GO), which may provide a basis for assessing patients' desert in some cases.[35-37] Savulescu defines a golden opportunity as "an offer of lifestyle which: 1. has either the same

valuable activities, but fewer risks *or* has greater objective value, but the same risks, as the existing lifestyle; 2. is realistically adoptable"[35] If a patient declines a GO, it may be reasonable to conclude that they are less deserving of medical treatment, ceteris paribus, and that medical professionals may, on this basis, justifiably give them lower priority. He gives the example of Jim, a chain smoker whose doctors advise him to switch to e-cigarettes. Jim refuses to take this GO, and thus it is clear to his doctors that he deserves lower priority when he later needs a lung transplant.[35]

It seems clear to me that Savulescu succeeds in establishing one desert basis in the case of Jim: Jim does deserve lower priority in virtue of having declined a golden opportunity. There may be, however, additional desert bases that render other patients even less deserving than Jim when considered in totality. The complexity of calculating desert, then, does not disappear, even in cases of golden opportunities.

VI. CONCLUSION

In this article, I have attempted to improve the epistemic argument against desert-based medical resource allocation in two ways. First, by formulating a new version of the argument that avoids unnecessary controversial assumptions. Second, by arguing that it is unfair to consider responsibility in developing a health need without also considering other desert-based variables in resource allocation. I conclude that the impracticability of reliably estimating patients' desert of medical resources provides a strong reason for ethicists to reject desert-based considerations in allocation decisions. More work should be done to determine whether patients' voluntary choices may be relevant for utilitarian reasons. Additional work should explore the

extent to which the reformulated epistemic argument presented here in a healthcare context may be adapted and applied to allocation decisions other contexts.

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