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# Are American transplant centers willing to transplant prisoners

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**Introduction:** The United Network for Organ Sharing (UNOS) is tasked with ensuring fair and equitable access to organs for patients seeking transplant. Despite UNOS' position statement clearly stating that prisoner status should not preclude transplant evaluation, prisoners continue to face significant barriers. The goal of this survey was to discover how many American transplant centers are willing to evaluate, list, and transplant prisoners.

**Materials and methods:** All adult kidney transplant centers listed as active on the UNOS website were contacted to participate in a survey asking if they were willing to evaluate, list, and transplant prisoners, and why or why not.

**Results:** A total of 122 centers responded. Forty-nine were willing to evaluate, 43 willing to list, and 42 willing

to transplant prisoners. Fourteen centers said yes, but on a case-by-case basis only. Things they reported considering were type of crime, length of sentence, and likelihood of release. Frequently cited reasons for not treating inmates were: inadequate follow up (28), insurance/funding (16), transportation (12), medication compliance (9), security (8), patient safety (8), and lack of social support (5). Twenty-four centers refused to disclose their policy or did not have one.

**Conclusions:** Prisoners continue to face barriers to evaluation, listing, and receiving kidney transplants. A lack of understanding of contraindications to transplant or a lack of knowledge about the prisoner system on behalf of transplant centers may contribute to these barriers. We feel as transplant professionals it is our responsibility to assist vulnerable patients in overcoming barriers to transplantation and work to ensure equitable access to organs, regardless of prisoner status.

**Key Words:** transplant, renal transplant, ethics

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## Introduction

Chronic kidney disease (CKD) is highly prevalent in the United States and can ultimately progress to end

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stage renal disease (ESRD).<sup>1</sup> Options for treatment of ESRD include hemodialysis, peritoneal dialysis, and kidney transplant. The United Network for Organ Sharing (UNOS) is responsible for ensuring fair and equitable access to organs for patients seeking transplant. Despite the UNOS/Organ Procurement and Transplantation Network's (OPTN) position statement that prisoner status should not preclude transplant evaluation, prisoners with ESRD continue to face barriers in this arena.<sup>2-4</sup> With an imprisonment rate of approximately 385 out of every 100,000 people at the end of 2020,<sup>5</sup> it is critical that these patients have access to appropriate treatment of ESRD, including the opportunity for renal transplant. However, it has

been shown that prisoners have significant barriers to accessing transplant.<sup>3,4</sup> The goal of this survey was to discover how many American transplant centers are willing to evaluate, list, and transplant incarcerated individuals.

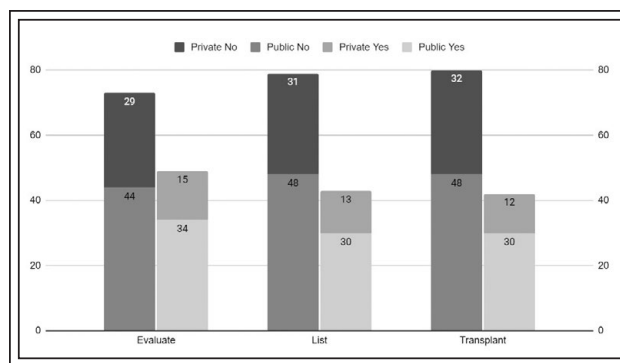
## Materials and methods

We identified all organ transplant centers via the member directory on the Organ Transplant and Procurement Website.<sup>6</sup> This list was accessed in March of 2020. Centers were excluded if they weren't active, didn't transplant kidneys, and were a children's transplant center. Thus, all adult kidney transplant centers listed as active on the UNOS website were included. This study did not meet our institution's human subjects research criteria and thus was exempt. The principles of the Helsinki Declaration were followed. We contacted each center by phone up to three times and asked to speak to a transplant coordinator or transplant surgeon. If they did not answer by the third attempt, they were considered non responsive. If they did answer, they were asked: are they a public or private hospital, are they willing to evaluate, list, and transplant prisoners. If they answered no, we asked why they were not willing to. The interviews were conducted in a standard fashion. They were open-ended questions. This data was compiled and analyzed with simple statistics. The open-ended responses were placed into various categories based on common themes, including: funding, follow up, transportation, compliance, security, patient safety, social support, and undisclosed. This project was not funded. There were no outside sources of support

## Results

A total of 248 centers were listed in the OPTN directory.<sup>6</sup> Fifty-four centers were excluded for being inactive or were Children's hospitals. This left a total of 194 centers eligible for inclusion. Of these, 72 centers were non-responsive. Thus, a total of 122 centers responded to our telephone survey. Of responders, 44 were private institutions and 78 were public institutions.

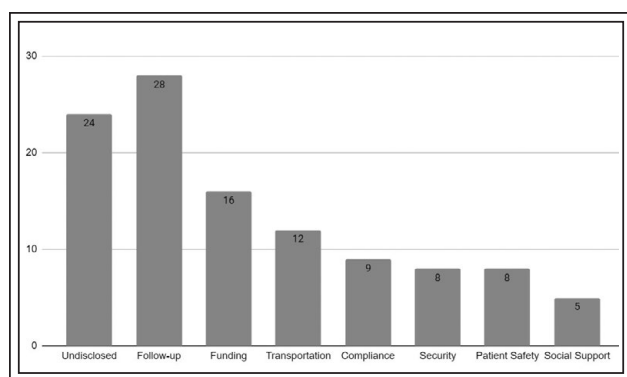
Forty-nine centers (40%) stated they were willing to evaluate prisoners. Of these, 34 were public hospitals and 15 were private hospitals. Forty-three centers (35%) stated they were willing to list these patients for kidney transplant, given they met their evaluation criteria. Thirty of these were public and 13 private. Only 42 (34%) stated they were willing to perform a transplant on a prisoner. Of these, 30 were public and 12 were private. This data is represented in Figure 1. Out of these responding centers, 14 (11%) said that they



**Figure 1.** Number of facilities willing to evaluate, list, or transplant prisoners. Reprinted with permission. *J Urol* 2021;206(Suppl 3):e646-e647.

were willing to evaluate, list, and transplant patients, but on a case-by-case basis only, based on consideration of the type of crime committed, length of the sentence, and likelihood of release.

In addition to finding out how many transplant centers are willing to evaluate, list, and transplant patients, we were also gathering information on why centers were not willing. The most frequently cited reason for not treating inmates was concern for inadequate follow up, which was reported by 28 centers. Other concerns included monetary barriers, with 16 centers citing obstacles such as lack of insurance or lack of funding for these patients. Unreliable transportation was reported by 12 centers, which included the patient's ability to get to the hospital on short notice for a donor kidney as well as their ability to make scheduled follow up appointments. Medication compliance concerns were cited by nine hospitals. Interestingly, some hospitals stated that incarcerated patients had worse rates of medication adherence and appointment attendance while some stated that incarcerated patients demonstrated better medication adherence and appointment attendance. Security concerns were reported by eight hospitals. This ties directly to funding, as they most commonly stated that the patient would be required to pay for armed guards out of pocket as they were required by hospital or state policy for incarcerated patients. Other reported reasons for not evaluating, listing, or transplanting incarcerated patients included concern for the patient's safety upon return to jail (eight centers), and lack of adequate social support (five centers). This data is represented in Figure 2. Twenty-four centers refused to disclose their policy at all or reported that their hospital does not have a policy on prisoners. Notably, two centers claimed incarceration was a strict contraindication to kidney transplant.



**Figure 2.** Most frequently cited reasons not to transplant prisoners.

## Discussion

While we know that CKD is highly prevalent in the general population, there is overall poor data regarding the prevalence of CKD and ESRD in prisoners.<sup>1</sup> It is reasonable to believe that CKD is underrecognized in prisoners, who also have disproportionately higher rates of risk factors for CKD to begin with.<sup>7,8</sup> Large surveys of this population cite factors such as “persistent kidney problems” or “kidney-related problems” but do not provide definitions.<sup>7-10</sup> Prisoners with CKD and ESRD should be afforded standard of care based on the prior United States Supreme Court legislation of *Estelle vs. Gamble*.<sup>11</sup> However, it is well reported that prisoners have widely variable access to healthcare screening, testing, and medical providers despite the requirement to provide standard healthcare to prisoners.<sup>7,12-15</sup> For example, access to dialysis has been shown to be a problem for prisoners. Chari et al surveyed U.S. state prisons and showed that out of 45 responding states, 24 had on-site dialysis services, 10 had only off-site dialysis services, and another 10 had both on-site and off-site dialysis services available.<sup>10</sup> While dialysis has emerged as the primary treatment for ESRD, the OPTN clearly states that “kidney transplantation is the treatment of choice for patients with advanced CKD and ESRD”.<sup>16,17</sup> For appropriately selected patients, kidney transplant not only improves patient quality of life, but also increases patient survival when compared to dialysis.<sup>16-18</sup>

Our survey found that only 40% of responding centers were willing to evaluate prisoners, despite the UNOS position statement that prisoner status should not preclude transplant evaluation.<sup>2</sup> Even less, 35% (43 centers) were willing to list prisoners, and 34% (42 centers) were willing to actually transplant prisoners.

The most frequently cited reasons for not evaluating, listing, or transplanting prisoners were: inadequate follow up, funding issues, and transportation. Importantly, 24 centers refused to disclose their policy or did not have a policy about prisoner status at all. Past surveys found equally disappointing results. For instance, Qazi et al reported that of their respondents, 19 (13%) said they had transplanted a prisoner and only 7 (4.8%) said they would still transplant a prisoner.<sup>4</sup> Jan et al performed a similar survey in 2019, showing that out of 201 responsive centers, only 19% said they would perform transplants for prisoners, and that the majority claimed hospital policy prevented them from transplanting.<sup>3</sup> Both studies found that there were certain geographic areas that had no centers willing to transplant prisoners.<sup>3,4</sup> From the first survey in 2013 to now, there has been a small increase in the percentage of centers willing to transplant prisoners, from 4.8% to 19% to now 34%. While an improvement, the data still demonstrates a persistent pattern over time of lack of access for prisoners desiring transplants throughout UNOS centers in the United States. Similar to our study, Qazi et al reported that logistics and cost of security were frequently cited as barriers to transplanting prisoners.<sup>4</sup> This demonstrates that the same barriers continue to persist over time, despite knowledge of said barriers.

Panesar et al documented their experience of establishing a transplant program at a maximum security state correctional facility. They excluded any patients who were medically unsuitable, had documented noncompliance with dialysis and medications, failed psychiatric clearance, or were illegal immigrants. Of note, they did not consider sentence length or what type of crime the patient committed. They listed 12 patients and transplanted nine. At 1 year, graft survival rate was 100%. They reported that three grafts ultimately failed prior to the 5-year mark, but none had failed due to poor compliance.<sup>18</sup> This data was published in 2014. In a follow up article from 2020, Gowda et al found that of 20 transplanted patients, 94% had graft survival at 1 year and 72% had graft survival at 3 years.<sup>4,19</sup> This is similar to the average graft survival rates in the United States, which is 92.7% at 1 year, and 77.6% at 5 years for deceased donor kidney transplants.<sup>19</sup> These findings support the idea that prisoners can be successfully transplanted when appropriately evaluated and supported by a correctional facility’s healthcare department.

While multiple studies have demonstrated the cost effectiveness of transplant specifically for Medicare savings, this is more complex for prisoners. For example, one such study found that the cost of

transplant versus hemodialysis breaks even at 34 months after transplant, and then results in a continued savings of \$2,400 per month for patients on Medicare.<sup>20</sup> In the above referenced transplant program for incarcerated patients, Gowda et al noted that “each transplant provided estimated savings of \$80,941 within the first 3 years and subsequently \$60,749 annually.”<sup>21</sup> In addition, while the OPTN statement does advocate for evaluation of prisoners, it specifically states it “does not address how governments allocate limited funds available for medical procedures”.<sup>2</sup> Thus, further work would need to be done to see if it is truly cost effective versus dialysis in prisoners.

Lack of adequate social support was cited by five centers as a reason not to consider prisoners for transplant. Historically, lack of social support was considered a contraindication to kidney transplant. It can also indirectly discriminate against vulnerable populations, such as those with low socioeconomic status, racial or ethnic minorities, patients from rural areas, and incarcerated patients.<sup>22</sup> The KDIGO Clinical Practice Guideline now states that individuals without social support who are able to care for themselves should still be considered for a transplant.<sup>23</sup> UNOS agrees that kidney transplant eligibility should not be contingent on a patient’s social support availability.<sup>24</sup> Thus, incarcerated persons who are still able to care for themselves should not be precluded from transplant because of lack of social support.

Twenty-eight centers cited lack of adequate follow up and twelve reported unreliable transportation. In the setting of quickly advancing technology for telehealth, which has proved to be efficacious throughout the pandemic, it is possible that concerns regarding transportation may be partially mitigated by utilizing virtual appointments.

In recent months, inefficiencies and adverse events due to the current organ allocation system, of which UNOS has been managing since 1986, have been brought to light, prompting more critical evaluation by the government and other agencies. A report by the United States Senate Committee on Finance identified that over a 10 year period, there were 1,100 complaints filed against UNOS, 53 of which were related to the delivery of organs with many ultimately being discarded.<sup>25</sup> These evaluations ultimately lead to Bill H.R.2544 “Securing the U.S. Organ Procurement and Transplantation Network Act,” being introduced in April of 2023 and ultimately passed by both the House and Senate in July of 2023. In short, the bill would allow for competition and bidding over multiple contracts to manage OPTN.<sup>26</sup> This change would significantly impact the transplantation system in the United States.

Our study does have limitations. Being a survey, there is a response bias. Our response rate was 49%. This is comparable to Qazi et al, who has 146 out of 242 centers respond to a similar style survey.<sup>4</sup> Furthermore, our results were impacted by who answered our questions and their knowledge of their transplant center policies. As this is a sensitive topic to discuss and has the potential to carry with it negative connotations or implicit bias, some responders may have felt obligated to answer a certain way or to not answer questions at all.

## Conclusion

Our survey shows a low proportion of transplant centers willing to evaluate, list, and transplant prisoners, despite OPTN’s position statement. As prevalence of ESRD increases in the incarcerated population, barriers to transplant for inmates need to be addressed. A lack of understanding of the contraindications to transplant or a lack of knowledge about the prison system on behalf of transplant centers may contribute to these barriers. However, there is likely a component of implicit bias and ethical dilemma. Further work will need to be done in regards to this population. □

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