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Editorial
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Where are the Hearts?

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Editorial

Over 30 years ago President Reagan signed the National Organ Transplant Act (NOTA), which established the federal legal framework for the procurement, donation and transplantation of organs; the law's advocates hoped that it would end organ shortages, but today over 120,000 Americans are on waiting lists [1]. Several scientific forums [1-3] have addressed this vexing problem, which does not seem to "go away". The shortage of organs, especially hearts, available for transplantation is undeniable. After the initial surge in the late eighties and early nineties, the number of transplants leveled off, and in the last few years even fell, despite that the number of those waiting in line for hearts has increased significantly. There is a critical shortage of organs available for heart transplantation. Of an estimated 60,000 potential recipients fewer than 2,500 undergo cardiac transplantation annually despite that by theoretical calculations ample number of donor hearts should be available [2]. Thus one may ask: Where did the hearts disappear? The answer is hearts are there, we just don't get them! Some members of the profession recommend monetary compensation for donated organs, paid either to living donors of kidneys, parts of liver or lungs, or to the family of organs obtained in cadaveric donations. The amount of compensation may vary from the cost of the funeral to outright payments to the family of heart donors. While this view appears to be a "practical" solution, it would make organ-trafficking acceptable and would open a "Pandora's box "of not only for ethical but also criminal and legal issues, - some may recount the medieval horrors of selling corpses for anatomical studies.

It would also raise the less gory, but certainly controversial issue comparable to the illegality of prostitution. How could our society, for reasons of possible exploration, forbid an individual to be compensated for temporary usage of their body, but condone permanently selling his or her body parts?

Those of us who seek a solution to organ shortage, especially to the inadequate number of hearts available for transplantation, must face all the "actors" of this danse macabre of desperate need. The surgeon, who at the dawn of heart transplantation was a cause celebre', if not an international but at least a local hero, today is only "just one of us". The focus of professional and public attention shifted to other issues, such as endovascular, minimally invasive, "off-pump" procedures, etc. Today, the once heroic heart transplantation is but another entry on the long list of "other" cardiac interventions, and may be done even by junior faculty barely out of training. In some institutions with "transplant profiles" the surgeon may be under some pressure of "volume-performance", but not in a scenario we may find at an average cardio-thoracic department where only 20-24 heart transplants a year are performed. Today, the surgical fee for a heart transplant is comparable to that of a valve repair, despite that the former requires more time to coordinate, prepare and perform. It could also involve flying small planes at night in stormy weather, dragging your off- duty partner into the hospital, and cancelling pre-arranged operative schedule. Besides the surgeons desire to sincerely help "another" patient, usually unknown to him previously, he has no incentive and certainly no time to prowl the critical care units and look for potential donors! If a donor heart is made available, he will indeed proceed with transplantation however, very few, if any, surgeons are out on the field searching for organs themselves. After that said, however, it is also likely that in the mirror of falling numbers of heart operations, our surgeons interest in heart transplantation may experience some revival. The change in the general attitude of institutions regarding cardiac transplantation has been somewhat similar. Subtle, but significant. Our hospitals initially enjoyed the publicity associated with heart transplantations, nowadays most of them look upon the issue as a money-losing moral obligation, similar to taking care of the uninsured in the Emergency Department. In the present economic environment, in some institutions with "heart transplant profiles", neither the surgeons nor the hospital administrators appear to be eager to expand their transplant programs. Where does that leave us? The pathway, described earlier to potentially improve the number of organs available for transplantation, was to pay or even barter for organs. This would probably yield more hearts.

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Would this help?

It might. However, even if we disregard the added cost, - a price tag of $20,000/donor was mentioned- the ethical issue of potential exploitation of the needy, would remain considerable if not insurmountable. Some seek the solution in artificial hearts, which are always "compatible" and just have to be taken of the shelf and they are ready for implantation. However with their initial cost of about $100,000 and a yearly expense of $200,000 maintenance, may be a clinical, moral but certainly not a practical economical solution. Significant and oftentimes devastating complications still occur, despite the improvements in the VAD (Ventricular Assist Device) technology and the constant work in risk modifying and risk stratifying strategies [4,5]. If society really means what it says, i.e. to discover a way to solve the donor organ shortage, we must find a path that is both morally acceptable and economically feasible. We stipulate that the goal of significantly increasing the number of available donor hearts could be achieved with less cost and with little, if any, ethical controversy, by redefining the role of the very important third entity in organ procurement: the transplant coordinator. It is not the intention of this Editorial to show any disrespect toward our organ procurers, who often work hard in the wee-hours of the night to obtain life-saving organs for our patients. They are, however, in most instances nurses or professional assistants who have only on-the-job training in organ procurement and lack special education in the psychological and other aspects of how to deal with grieving, occasionally hostile, family members who just lost a loved one or may cling to an unreal hope of recovery from brain death. Notably, our coordinators are paid an average mid-level nursing salary and have little chance of progressing above that level, regardless of their performance. Paying for hearts is an abyss, society should not be eager to look into. We must seek alternatives. Measures already applied or considered, such as loosening the criteria of acceptability of donor organs and/or recipients are not a long term solution. We also propose to spend a fraction of the funds we are evidently ready to pay for organs and are already spending on long-term mechanical heart support, to underwrite the expenses of hiring more transplant coordinators, provide them with an adequate training which contains elements of psychology, motivation and marketing as well. They should also receive salaries that reflect not only their position, but also their performance, i.e. the more hearts they "bring in" the more money they may earn. If their performance should fall, so would their income. If somebody may look at this arrangement as a tit-for-tat, so be it!

It is a tit-for-tat!

Is this arrangement ethically objectionable? It may be for some. But it is still better than tempting a father of starving children to sell one of her/his kidneys. We should also provide maximal assistance to our transplant personnel in their arduous task both in numbers and in compensation. This approach would also be economical. While to cover the need of a patient with a heart transplant it costs 30,000 to 40,000 a year to insert and maintain a patient on an artificial heart costs about 200,000 annually. That covers the salary of about three transplant procurers. If each of these brings in only two "extra" donor hearts a year they have earned their salary! They should talk to the family and the surgeon should also establish a rapport with the family, if necessary. With all due respect to privacy and emotions, we have to get more "aggressive". We may have to go as far as to show the potential donor families the photograph of the potential recipient desperately waiting for a transplant. If organ shortage is not a matter of life and death, I don't know what is? We have to reorganize our organ procurement system. This is not our choice, it is our duty. To accept and utilize this more active approach, we must be extremely careful to assure that it becomes much more effective but without being overly aggressive, especially in the context when approaching grieving families. This is a difficult but with proper coaching, certainly not an impossible task. We have to learn to channel emotions which are working towards turning denial, into a wish to help those who are in desperate need. To hire more and better trained organ procurers would not necessarily exclude other measures. There could be some compromise for direct monetary compensation for organs, but it should certainly be short of direct payment for organs. We may contribute to the funeral expenses of a heart donor or cover the hospital expenses of a living organ contributor. But most of all we need more and specially trained and well paid organ procurers who understand and who show tact and respect, but also the degree of tenacity and aggressiveness necessary for improved performance. We should give it a try.

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