Perceptions of Healthcare Professionals of Tertiary Care Centre of Eastern Nepal on Organ Trafficking to Aid in Formulation of Proper Organ Transplantation Regulatory System

Bikash Sah1, Shivendra Jha2, Ashok Ayer3, B. N. Yadav2

1Associate Professor, Department of Forensic Medicine and Toxicology, B. P. Koirala Institute of Health Sciences, Dharan, Nepal
2Professor, Department of Forensic Medicine and Toxicology, B. P. Koirala Institute of Health Sciences, Dharan, Nepal
3Associate Professor, Department of Conservative Dentistry and Endodontics, B. P. Koirala Institute of Health Sciences, Dharan, Nepal

ABSTRACT
Organ transplantation is the only treatment option for the management of organ failure, and its success directly depends upon the balance between the demand and supply of the organs. However, the demand for organs far outpaces its supply. At the same time, most of the developed countries follow an altruistic way, which is organ donation with a will and without any form of benefit for organ supply. Thus, it can be seen that legally all who are involved in organ transplantation get some form of benefits except organ donors. Donating a vital portion of the body by putting at lifelong risk, just for the sake of altruism, can neither justify ethically nor help to meet the increased demand for organs. Ultimately this gives rise to the incident of organ trafficking in order to meet the organ demand. This research is done to know the perception of the healthcare professionals of the tertiary-care center of eastern Nepal regarding organ trafficking.

Keywords: Crime, Legal system, Organ Trafficking, Organ Transplantation.

INTRODUCTION
Organ transplantation is one of the leading therapeutic innovations. Ever since the first transplant in 1954, organ transplantation has saved and extended the lives of thousands of patients.1 With the aging of the populace around the world, expanded opulence, and development in burdens of illness such as diabetes, the request for transplantation is expanding exponentially.2 Transplantation of organs is hence a life-prolonging and final resort intercession for numerous, but there's a grave disparity between supply and demand.3 The supply of organs for transplantation has been found to be controlled by diverse nationals and international organ transplantation regulatory systems. Despite the varieties within the laws directing organ transplantations, a single lawful principle that has picked up authoritative endorsement all through the foremost created nations is a supply of donated organs for transplantation must be a free and altruistic act of liberality. Be that as it may, as per numerous critics, such law consolidates an ethical thought of altruism that has not delivered an adequate supply of donated organs.4,5 In spite of measures to broaden the donor organ pool, global organ deficiency continues. With organs’ increased value comes their increased potential profit, fuelling desire with some people to trade and sell. Subsequently, following to altruistic obtainment system of organ supply, a black market run by organ trafficking syndicates coexists to meet the request that altruistic systems fall flat to fulfil. Beneath these circumstances, frantic patients look for techniques to get organs by paying any sum through any implies, even in an illicit way.1 The unlawful organ trade creates benefits between $514 million to $1 billion a year as per a report by Global Financial Integrity.6 Organ trafficking is an unlawful, however flourishing trade around the globe.6 In this way, transplantation is getting to be a casualty of its own success, with demand for organs far surpassing supply.1 The increasing demand of people from developed countries seeking organs puts pressure on underdeveloped nations that seek to curb their own citizens from selling organs.3 Nations purportedly encouraging organ trafficking to incorporate Egypt, India, Iran, Pakistan, and the Philippines. Brokers reportedly thrive in Israel and in South Africa. As of late, India reported breaking up a ring of unlawful organ acquirement.
that had included 500 illicit transplants; "donors" were paid up to $2,500 for kidneys, and a few were constrained to give at gunpoint.\(^7\) At the same time, donors are also coerced, lied to, paid little, and all-too-frequently left with permanent disabilities and without treatment. Simultaneously, donors are coerced, lied to, paid small, and all-too-frequently left with permanent disabilities and without treatment.\(^6,7\) The foremost common reported form of organ trade is the live kidney trade.\(^1\) In spite of the "donors" or sufferers have been found originating in numerous other developing nations, Nepal has been called a "kidney bank."\(^8,9\) Over the past 15 years, intergovernmental organizations, such as the United Nations,\(^10\) the World Health Organization (WHO),\(^11\) and the Council of Europe,\(^12\) and medical bodies, such as the World Medical Association\(^13\) and the Declaration of Istanbul Custodian Group,\(^14\) as well as an individual nation have increased efforts to prevent harmful practices related to organ procurement and transplantation. However, there's a common consensus that organ trafficking may be a crucial worldwide issue that remains under-addressed by both the appeals of worldwide organizations and individual states' domestic laws.\(^3\) Thus, this study has been done to know the perception of healthcare professionals of the tertiary care centre of eastern Nepal regarding organ trafficking.

**Materials and Methods**

Ethical clearance has been taken from the Institutional Review Committee, BPKIHS, Dharan. It is a descriptive and cross-sectional study. A purposive sampling of 221 among health care professionals participated in the study. Inclusion criteria: Faculties, Nursing In-charges, lab-technicians, radiology technicians who gave informed consent. "pre-established self-administered close-ended questionnaire"\(^15\) has been used among the participants (B. P. Koirala Institute of Health Sciences) from January–March 2020. Paper survey technique was used to collect data. The paper questionnaire doesn't include the information related to the personal identity of the participants. Collected data were entered in Microsoft Excel and coded accordingly. The statistical analysis was performed to calculate frequency by statistical package for social science (SPSS).

**Results**

Total of nine questions from the questionnaire related to organ trafficking were used, and the outcomes of the questions expressed in frequency and percentage are presented in Tables 1 and 2.

**Discussion**

Organ trafficking and trafficking in people for the reason of organ transplantation are recognized as significant universal issues. However, organ trafficking stays widespread—and is destroying those who are its victims.\(^3\) The selling of human organs for transplantation is a crime in Nepal under the Human Body Organ Transplantation (Regulation and Prohibition) Act, 2072.\(^16\) Furthermore, the Human Trafficking and Transportation (Control) Act, 2064\(^17\) clearly state that the extraction of human organs, except as otherwise determined by law, is an act of human trafficking and transportation. However, the punishment given by these different acts for the same crime that is organ trafficking is found to be different, and our study participants (87.78%) wish to see uniformity in the punishment. Despite these acts, several cases of unlawful kidney transplantation have been detailed by the media within the last couple of years and Kavrepalanchok district has created terrible notoriety as the "kidney bank of Nepal."\(^18\) during the

<table>
<thead>
<tr>
<th>Q. No.</th>
<th>Question(Q)</th>
<th>Response(R)</th>
</tr>
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<tbody>
<tr>
<td>1.</td>
<td>Should the transplant surgeon be allowed to advise the recipient to contact a broker for a quick organ donation process?</td>
<td>90.5</td>
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<tr>
<td>2.</td>
<td>If the benefit to the donor is not legal, but the donor donated an organ in order to receive some benefits promised by the recipient or broker, and the promise was not made, should the recipient/broker be punished if the donor filed a case against them?</td>
<td>88.23</td>
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<td>3.</td>
<td>If the benefit to the donor is not legal but the donor donated an organ in order to receive some benefits promised by the recipient or broker, and the promise was not made, should the donor be punished if the donor filed a case against them?</td>
<td>96.38</td>
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<tr>
<td>4.</td>
<td>If the benefit to the relative of the donor in cadaveric transplant is not legal but the relative of the donor was promised some benefits after donation and the promise was not made, should the recipient/broker be punished if the relative filed a case against them?</td>
<td>80.54</td>
</tr>
<tr>
<td>5.</td>
<td>If the benefit to the relative of the donor in cadaveric transplant is not legal, but the relative of the donor was promised some benefits after donation, and the promise was not made, should the relative of the donor be punished if the relative filed a case against them?</td>
<td>90.95</td>
</tr>
<tr>
<td>6.</td>
<td>Should the punishment system for the same crime addressed through different acts be made uniform?</td>
<td>87.78</td>
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previous 5 years, more than 300 individuals have been detailed to be casualties of kidney traffickers in this district alone.18

Trafficicking allegedly endures, in spite of the different worldwide and domestic endeavors, and the reason behind it in our nation can be realized from an encounter of a male victim, who is one among numerous casualties of Kavrepalanchowk district. A broker counseled him by saying that he will be offered 30 lakh Nepali rupees for a piece of his meat, which will re-grow. Upon his agreement, he was escorted to a clinic in Chennai-India with a fake report expressing that he is a relative of a recipient. After transplantation, he was given 20,000 Nepali rupees, less than 1% of the agreed amount.18 It is interesting to note that in a study done on selected Village Development Committees in Kavrepalanchowk district by Forum for Protection of People's Rights Nepal9 77.2% of participants, who expressed their view as the absence of government restrictions on the sale of kidneys responsible for organ trafficking, are unaware of the law of the land regulating organ transplantation. The same study9 has shown lack of knowledge and education (93.2%) as major reasons victims fall prey to kidney traffickers which is almost similar to our research finding where 84.16% of respondents expressed their opinion that public awareness campaigns decrease organ trafficking crime. When non-victim cases of the study done in Kavrepalanchowk district9 were inquired why victims of kidney trafficking did not look for legal intervention even when they felt cheated, about all (95.6%) said that they feared the law, making both buying and selling a kidney unlawful which supports our study finding where donors (87.78%) and their relatives (85.06%) are supported for no punishment if they file a case of cheating. Similarly, in Punjab-India, a kidney seller that was not paid the sum guaranteed by brokers had been prosecuted and sentenced to two years in imprisonment for making a wrong affidavit.19

The UK's National Health Service cites WHO gauges that around 10,000 illicit transplants take place each year, with beneficiaries in nations like China, India, and Pakistan paying more than 50 times as much to purchase a kidney as the donors get for selling it.9 This is not reported because of the fear of the law that criminalizes the victim. Our study also supports for the legal protection of health professionals (84.62%) and organ recipients (80.54%) for the emergency condition because health professionals may provide information to support an investigation of suspected transplant-related crimes, and recipients may become victims of shocking medical surroundings and incorrect procedures used in illegal organ transplantation. Legal systems should aim to hold those who profit from transplant-related crimes criminally accountable and to protect those who may be victims.20 Similarly, this study criminalizes the recipients like brokers if they found cheating the donors (91.85%) or the donors' relatives (89.14%).

Legally permissible transplantation with any doubt of involvement of broker needs to be informed to the concerned authority. Still, if the patient's life is to be saved in an emergency condition, the team should not be punished. However, we recommend that this should immediately be followed by informing the concerned authority. Moral transplantation cannot be accomplished unless all health professionals abstain from engaging in or encouraging transplant-related crimes and giving data to help the concerned authorities prevent and prosecute such crimes.21 To be effective, legal prohibitions need to include a ban on brokers in organ transplantation.22 Similarly, 89.14% of participants of this study reject the brokering system. Law enforcement officers ought to work on viable ways of guaranteeing cooperation with health professionals in addressing these crimes.22

Thus, in one hand, illiteracy is found to be the reasons for the flourishing black market of organ trade than in the other hand, criminalizing the so-called victim-donor, health care workers and recipients leads to under-reporting of the crime, both ultimately leading to the rise in organ trafficking. Healthcare professionals' opinions for donors, recipients, and their relatives act as an expert opinion, which is the strength of this research. However, they may be biased in giving an opinion for themselves, which is the weakness of this research. Thus, Educational and public media programs are recommended to educate average citizens on the issue of organ transplantation. Simultaneously, general public opinions should be considered while formulating the Organ Transplantation Act for their increased acceptance.

### Table 2: Frequency distribution of the responses

<table>
<thead>
<tr>
<th>Q.N.</th>
<th>Question(Q)</th>
<th>Yes (%)</th>
<th>No (%)</th>
<th>No, if done in an emergency (%)</th>
<th>Can't say (%)</th>
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<tbody>
<tr>
<td>7.</td>
<td>If the broker system is not legal but the recipient used a broker, should the recipient be punished?</td>
<td>13.57</td>
<td>3.61</td>
<td>80.54</td>
<td>2.26</td>
</tr>
<tr>
<td>8.</td>
<td>If broker system is not legal, but the transplant team performed transplantation knowing that the donation was mediated through a broker, should each member of the transplant team be punished?</td>
<td>9.95</td>
<td>3.17</td>
<td>84.62</td>
<td>2.26</td>
</tr>
<tr>
<td>9.</td>
<td>What is your opinion regarding the effect of Public Awareness Campaigns (Presumptivity) on crimes associated with organ transplantation?</td>
<td>Increase crime (%)</td>
<td>Decrease crime (%)</td>
<td>No effect (%)</td>
<td>Can't say (%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9.05</td>
<td>84.16</td>
<td>1.36</td>
<td>5.42</td>
</tr>
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</table>
**CONCLUSION**

This study has found healthcare professionals' perceptions in increasing public awareness, in criminalizing those who are benefited illegally from transplantation and in protecting legally to those who are victimized from transplantation to aid in control and prevention of organ trafficking.

**Ethical clearance**

Taken from "Institutional Review Committee, B. P. Koirala Institute of Health Sciences, Dharan, Nepal."

**REFERENCES**