ABSTRACT

Objective. The International Registry in Organ Donation and Transplantation (IRODaT) presents final data on worldwide donation and transplantation activity to the community. The purpose of this report is not only to present raw data, but also to make organ donation effectiveness rates a useful tool to reveal similarities between countries on an international level.

Materials and Methods. The IRODaT Registry produced this report of 2013 statistics thanks to the collaboration of the official reporters, professionals in coordination and transplant services from national transplant organizations, and from the Ministries of Health of each reported country.

Results. The actual deceased donors and living donors rates, according to the total number of donors, from 72 countries can be analyzed using IRODaT tools, allowing the comparison and study of tendencies and rates of organ donation and transplantation activity at an international scale. IRODaT has been collecting and disseminating worldwide data since 1998. In this issue, it is shown that most of the countries that report the major activity in actual deceased donors are located in the European region. On the other hand, regarding living organ donation, the country location is more varied, including countries from Africa, Asia, and America.

Conclusions. The results obtained through the IRODaT Registry provide a quick, clear, and illustrative view of worldwide organ donation activity.

ORGAN shortage is the fundamental limiting factor for several diseases [1]. Organ transplantation has become an accepted treatment for end-stage organ failure worldwide [2]. Not only from a lifesaving point of view, but also regarding improved quality of life and economic benefit, transplantation has become the standard treatment of choice [3,4]. Organ donation and transplant rates vary widely across the globe [5].

The International Registry in Organ Donation and Transplantation (IRODaT) presents final data on worldwide figures from 2012 and 2011. Continuous improvement of the network allows IRODaT Registry to record valuable information with data from 72 countries.

METHODS

The IRODaT Registry produced this report thanks to the cooperation of the official reporters, professionals in coordination and transplant services from national transplant organizations, and Ministries of Health of each reporting country.

Data are requested at the beginning of the year. Reporters are contacted twice per year, and IRODaT provides them individual credentials in order to facilitate the introduction of the data through the IRODaT online platform. That information is analyzed by IRODaT professionals, a group of health experts who carefully check the information and, when it is necessary, contact the reporter to confirm the correctness of the value.

Percentages were calculated by dividing actual deceased organ donations by the total number of organ donations, and living organ donations by the total number of organ donations. The per million population (pmp) value was calculated according to the total population of the country (obtained from the World Health Organization database).

RESULTS

Comparison data from the reporting countries may provide an illustrative idea of the distribution of the actual deceased and living donors around the globe (Fig 1). For example, European countries such as Slovenia, Luxembourg, Slovak

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Fig 1. Actual deceased organ donors and living donors worldwide 2012.

*2011 data
Fig 2. Kidney transplantation from deceased donors.
Fig 3. Kidney transplantation from living donors 2012.
Republic, Estonia, and Croatia lead deceased donor rates. On the other hand, countries reporting mainly living organ donation activity are from the Asia and Africa regions, such as Singapore, Libya, and Sudan.

Similar comparison data can be analyzed regarding the different transplanted organs. The worldwide kidney transplantation data are presented divided in 2 graphs, transplantation from deceased donors and from living donors. Regarding kidney transplantation from deceased donors (Fig 2), it has been observed that the major activity is carried out in European countries: in 2012 Croatia reported 53.8 pmp, Spain 47.5 pmp, Estonia 43.9 pmp, and Norway 43.7 pmp. It coincides with the greatest actual deceased organ donors numbers, which were reported by countries from the European region as well. Concerning kidney transplantation from living donors (Fig 3), locations of countries with major activity are extremely varied. As shown in the graph, countries from Europe, America, and Africa in 2012 reported the main activity: Turkey had 31.5 pmp, Netherlands 29 pmp, Costa Rica 24.1 pmp, and Lebanon 22 pmp.

DISCUSSION

The results obtained through the IRODaT provide a quick, clear, and illustrative view of organ donation and kidney transplantation worldwide, while allowing comparison based on the total number of donors pmp and on actual deceased and living donor percentages.

REFERENCES


