



## Gypsy Population Presents a Favorable Attitude Toward Related Living Donation

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### ABSTRACT

**Introduction.** Negative organ donation rates among the Gypsies is much higher than that of any other social group in Spain. However, living donation rates have not been raised much in this social group, despite the existence of several Gypsy patients on the waiting list for transplantation.

**Objective.** To analyze the attitude toward related living donation among the Gypsy population who reside in Spain.

**Methods.** This type of study is an observational sociological study. The study consisted of the adult Gypsy population residing in Spain, and a random sampling of 230 adult gypsies was conducted. Attitude questionnaires for live donation, both hepatic PCID-DVH-Ríos and renal PCID-DVR-Ríos, were used, and random selection was based on stratification. Questionnaires were self-administered and completed anonymously. Student *t* test,  $\chi^2$ , Fisher, and a logistic regression analysis were used.

**Results.** A sample of 206 Gypsies (52% women) with a mean age of 34 years is obtained. Seventy-two percent ( $n = 150$ ) would donate an organ to a relative in life, 8% ( $n = 16$ ) would not donate it, and 20% ( $n = 41$ ) have doubts. Respondents with a favorable attitude toward living donation presented a more favorable attitude toward cadaveric organ donation (55% vs 0%,  $P < .001$ ). The attitude toward living kidney donation was more favorable (81% in favor) than toward living liver donation ( $P < .001$ ).

**Conclusions.** The Gypsy ethnic group is sensitized to live donor transplantation. The family and cultural roots of Gypsy people could condition this favorable attitude, a fact to be taken into account to sensitize this social group and promote donation campaigns with the aim of increasing donation rates.

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**T**HE RATE of refusal to donate organs after the death among the Gypsy people is much higher than that of any other social group, both in Spain and in the rest of the countries around. However, patients of this ethnic group who are susceptible to transplantation are still included on the waiting list for transplant. Thus, the preliminary data of our group obtained in Spain has shown that it is a group where it is very difficult to address the issue of death and the issue of organ donation and transplantation [1,2]. This fact

should enhance other donation options to alleviate these deficits. However, living donation has been little raised in this social group, despite the existence of several Gypsy patients on the waiting list for transplantation. The objective

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of this study is to analyze the attitude toward related living donation among the Gypsy population living in Spain.

## METHODS

### Type of Study

An observational sociological study was used.

### Population Under Study

The adult Gypsy population residing in Spain was the target audience.

### Sample

A random sampling of 230 adult gypsies under 50 years old was taken.

### Appraisal Instrument

The attitude was assessed using a validated questionnaire of attitude toward organ donation and transplantation—PCID-DVR Ríos: A questionnaire of the International Collaborative Organ Donation project about Living Kidney Donation (Proyecto Colaborativo Internacional Donante sobre la Donación de Vivo Renal in Spanish)—developed by Dr. Ríos [3–9]. This questionnaire included items distributed into three subscales or factors, and it was validated in the Spanish population, having a total explained variance of 63.995% and a Cronbach's alpha reliability coefficient of 0.778.

### Fieldwork

To carry out the project, the patriarch of two Gypsy villages was contacted in order to access the project and to help select the potential respondents. A random selection was made according to stratification. The completion is anonymized and self-administered. Verbal consent was requested to conduct the study with potential respondents.

### Statistics

The data were stored on a database and analyzed using a statistical package. Descriptive statistical analysis was carried out on each of the variables; for the bivariate analysis, Student *t* test and the  $\chi^2$  test were complemented by an analysis of remainders. Fisher exact test was applied when the contingency tables had cells with an expected frequency of <5.

## RESULTS

The authors interviewed 206 people of Gypsy ethnicity; 52% (*n* = 106) were women, and the average age of 34. Regarding live donation in general, 72% (*n* = 150) indicate that they would make a related organ donation in life. Of the rest, 8% (*n* = 16) would not donate, and the remaining 20% (*n* = 41) have doubts. Respondents with a favorable attitude toward living donation presented a more favorable attitude toward the donation of cadaveric organs (55% vs 0%, *P* < .001). Regarding the organs to be donated, they present a more favorable attitude toward living kidney donation (81% in favor) than toward living liver donation (81% vs 63%, *P* < .001). Regarding the related living kidney donation, 81% (*n* = 166) are in favor; the rest are not in favor, except one respondent. It is noteworthy that this

subgroup in favor of related living donation has a favorable attitude toward organ donation after death (87.5% vs 63.2%, *P* < .001). Finally, the results indicate that the economic incentive is not valued as favoring the donation of an organ in life, but there is a family bond in between. Thus, only 2.4% (*n* = 5) indicate that they would donate for money and another 9.2% (*n* = 19) condition it to the amount; 7.3% (*n* = 15) would value it according to the organ that should be donated. The rest would not donate or did not respond.

## DISCUSSION

The Gypsy population presents cultural and social peculiarities that have made it difficult to integrate into the societies where they reside [3–8,10–18]. Regarding organ donation and transplantation, they are one of the groups with lower organ donation rates after death [1]. No studies have been described that analyze the attitude toward living donation in this population group. Our data show that the attitude toward related living donation is well accepted in the Gypsy community. Thus, 72% would be in favor of making a related donation to a solid organ, a percentage that rises to 81% when it is a kidney. These data are similar to those described in Western studies [3–7]. Therefore, living donation should be proposed this group to be included in the waiting list for transplant. The family and cultural roots of Gypsy people could condition this favorable attitude toward donation, a fact to be taken into account in order to sensitize this social group and promote donation campaigns with the aim of increasing donation rates. Methodologically, studies in this type of population are difficult, despite the measures taken to carry out these studies. In this sense, we want to emphasize that despite the support of the patriarch of the group, the random sample obtained is diverted to a young population; thus, the average age is only 34 years. In addition, it emphasizes that it is a group with a very favorable attitude toward organ donation after death, when we have evidence to the contrary [1]. This limitation must be taken into account when evaluating the results of this work. In conclusion, the Gypsy ethnic group is sensitized to live donor transplantation if a family member needs it. The family and cultural roots of Gypsies could condition this favorable attitude toward donation.

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