



# Gypsy Population With University Studies Is a Key Ethnic Subgroup for the Promotion of Organ Donation Among the Gypsy Population

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## ABSTRACT

**Introduction.** The refusal to consider death and the donation and transplantation of organs make Gypsies one of the subpopulation groups with the lowest donation rates in Europe. The approach of this social group implies the support of the most favorable social groups within their own ethnic group. In this sense, the young population with a high level of education is usually the most favorable toward organ donation.

**Objective.** To analyze the attitude toward the donation of one's own organs for transplantation among the Gypsy population under 45 years and with secondary or university studies.

**Method.** Population under study: The Gypsy population under 45 years old with secondary or university studies who currently reside in Spain. Assessment instrument: The attitude questionnaire for organ donation for transplantation PCID–DTO Ríos. Fieldwork: A random selection based on stratification. Anonymity and self-administered fulfillment. Statistics: Student *t* test and  $\chi^2$ .

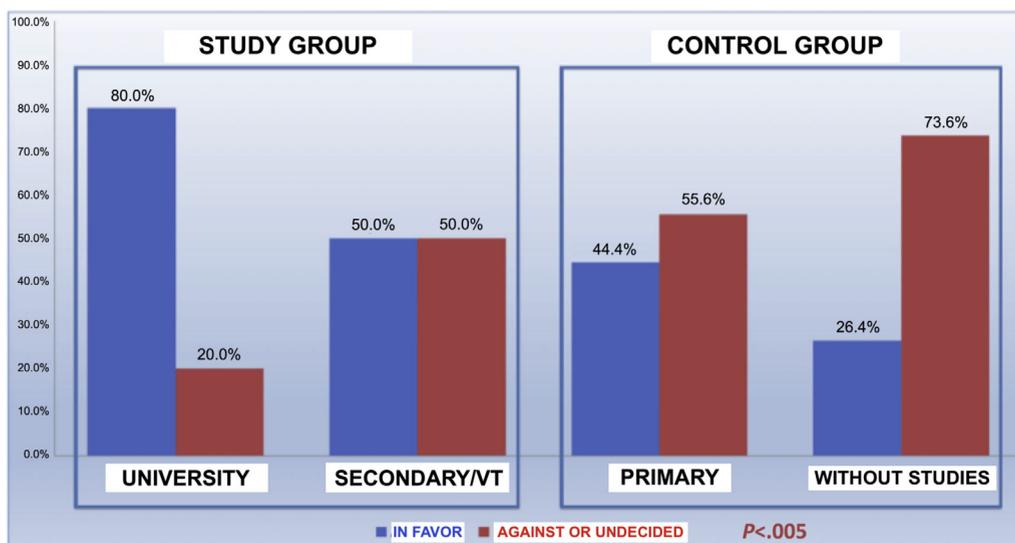
**Results.** A total of 44 Gypsy people under 45 years of age were surveyed (mean age  $31 \pm 8.9$  years); 66% were women, and the rest were men. Of these, 20 had university studies, and 24 had secondary or vocational studies. The attitude is favorable toward organ donation in 64% of the respondents, with 80% among university students and 50% among those with secondary or vocational education ( $P < .005$ ).

**Conclusions.** The young Gypsy population with university studies has a very favorable attitude toward organ donation. This population subgroup must be key in the promotion of organ donation in the Gypsy population, so the transplant coordinators must request their collaboration in the promotion campaigns of organ donation and transplantation.

**O**RGAN transplantation is a fully acceptable therapy, mainly limited by the shortage of organs available [1]. In order to increase the number of transplant organs, it is necessary to act on several levels, both within organizations and by raising awareness in society [2–6]. There are social groups with very low donation rates, and it is necessary to act to try to reverse this situation. Among these social groups, some stand out, especially the Gypsy ethnic group.

The refusal to consider death and the donation and transplantation of organs make Gypsies one of the subpopulation groups with lowest donation rates in Europe. Thus, the preliminary data of our group obtained in Spain have shown

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**Fig 1.** Attitude toward the donation of own organs after dying, both in the study group (university studies, secondary studies, vocational training) and in the control group (primary studies and without studies).

that it is a group where it is very difficult to address the issue of death and the issue of organ donation and transplantation [7]. For this reason, a project has been designed to determine the main fears of this population toward organ donation and to be able to act to improve that attitude and minimize the ancestral fears they present toward these issues. Based on this, for the approach of this social group it is essential to have the support of the most favorable social groups within their own ethnic group. In this sense, the young population with a high level of education is usually the most favorable toward organ donation. The aim of this study is to analyze the attitude toward organ donation and transplantation among the Gypsy population under 45 years of age and with secondary or university studies.

## METHODS

### Population Under Study

The Gypsy population under 45 years old with secondary or university studies who reside in Spain was the target audience for this study.

### Assessment Instrument

This study used a validated attitude questionnaire for organ donation for transplantation—PCID-DTO RIOS: The questionnaire of Proyecto Colaborativo Internacional Donante sobre Donación y Trasplante de Órgano (in Spanish), developed by Dr. Ríos [2–6,8–10]. This questionnaire includes questions distributed in four subscales or validated factors in the Spanish population, presenting a total of explained variance of 63.203% and a coefficient of Cronbach's alpha reliability of 0.834.

### Control Group

A sample of the Gypsy population with primary studies or without studies, previously carried out by our research group Collaborative International Donor Project, is used as a control group.

### Fieldwork

In order to carry out the project, the patriarch of a Gypsy village was contacted in order to access the project and to help select the potential respondents. A random selection was made among people under 45 with secondary or university studies. The completion was anonymous and self-administered. Verbal consent was requested to conduct the study to potential respondents.

### Statistics

The data were stored on a database and analyzed using statistical package. Descriptive statistical analysis was carried out on each of the variables; for the bivariate analysis, Student *t* test and  $\chi^2$  test were complemented by an analysis of remainders. Fisher's exact test was applied when the contingency tables had cells with an expected frequency of  $<5$ .

## RESULTS

A total of 44 Gypsy people under 45 years were surveyed (mean age  $31 \pm 8.9$  years); 66% were women and the rest were men. Of these, 20 had university studies, and 24 had secondary or vocational studies. The attitude is favorable toward organ donation in 64% of the respondents, with 80% among university students and 50% among those with secondary or vocational education ( $P < .001$ ). When compared with the control group of the population without studies or primary studies, it is objectified that those who do not have studies are in favor of donating organs in 26.4% and those with primary studies in 44.4%. The significant differences with the study group ( $P < .001$ ) can be seen in Fig 1.

## DISCUSSION

The Gypsy population presents cultural and social peculiarities that have made it difficult to integrate into the societies they live in [2–6,8,11–19]. Regarding organ

donation and transplantation, they are one of the groups with lower organ donation rates after death. Their beliefs and grief in the face of death make it difficult to approach organ donation. Few psychosocial studies have been carried out in this regard, given the difficulties involved in carrying out these projects. Our group carried out a pilot study in Spain, where a majority rejection of the subject of death and organ donation was objectified [7]. In this first study, it was observed that without the collaboration of the population of their same ethnic group it would be difficult to obtain an approach that had any guarantee of success. The problem is how to select this group of collaborators in such an unfavorable group. Our study shows that the population with university studies is the most sensitized and where we should look for the necessary support to carry out a project with guarantees in this field. Specifically, the population with university studies are the most sensitized to the issue of organ donation and transplantation. In conclusion, the young Gypsy population with university studies has a very favorable attitude toward organ donation. This population subgroup must be key in the promotion of organ donation in the Gypsy population, so the transplant coordinators must request their collaboration in the organ donation and transplant promotion campaigns.

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