

ORIGINAL ARTICLE

Family decision-making regarding organ donation in Peru: an analysis of interviews and health systems

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RESUMEN

Objective: To identify the sociodemographic, clinical, and institutional factors associated with family acceptance of organ donation and to describe the reasons for refusal reported by families of potential donors cared for in public and private healthcare facilities between 2014 and 2022.

Methods: This was an observational, cross-sectional, analytical study based on a secondary analysis of the institutional database of the Dirección General de Donaciones, Trasplantes y Banco de Sangre (Digdot). Of 7,074 records, those corresponding to facilities of the Ministerio de Salud, EsSalud, private clinics, and the Fuerzas Armadas y Policía Nacional del Perú that had complete information were included, while records without a family interview were excluded, yielding 1,668 cases for analysis. Sociodemographic factors (sex, age, and geographic origin), clinical factors (potential donor diagnosis), and institutional factors (donor-generating institution), as well as reasons for family refusal, were analyzed. Associations between variables were assessed using the chi-square test and the Mann-Whitney U test. Crude prevalence ratios (cPRs) and adjusted prevalence ratios (aPRs), with 95% confidence intervals (95% CIs), were estimated using Poisson regression with robust variance. The adjusted model included variables that were significantly associated in the bivariate analysis and were epidemiologically plausible.

Results: Family acceptance was 32.6%. A higher proportion of interviews was conducted in Lima and the central areas of the country. Significant differences were observed by age group ($p = 0.001$), with a lower proportion of children (3.9%) among cases with family acceptance. In the adjusted analysis, a higher prevalence of acceptance was observed among adults aged ≥ 60 years than among adults aged 30–59 years ($aPR = 1.22$, $p = 0.039$, 95% CI: 1.01–1.48). Likewise, the prevalence of acceptance was lower in the Fuerzas Armadas y Policía Nacional del Perú ($aPR = 0.37$, $p = 0.033$, 95% CI: 0.15–0.92) than in EsSalud. The main reasons for refusal were preservation of bodily integrity (38.0%), family disagreement (19.5%), and refusal expressed while alive (19.1%).

Conclusions: Family decision-making regarding organ donation in Peru is influenced by institutional factors and cultural beliefs, with differences according to the potential donor's age. Strengthening training for healthcare personnel, promoting public information, and developing strategies sensitive to the potential donor's age are key steps to reduce refusal rates and improve organ availability across all stages of life.

Keywords: Attitude to Health; Brain Death; Tissue and Organ Procurement; Health Systems; Decision Making, Shared (Source: MeSH)

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Decisión familiar frente a la donación de órganos en el Perú: análisis de entrevistas y sistemas de salud

RESUMEN

Objetivo: Identificar los factores sociodemográficos, clínicos e institucionales asociados a la aceptación familiar frente a la donación de órganos y describir los motivos de negativa expresados por las familias de potenciales donantes atendidos en establecimientos de salud públicos y privados entre 2014 y 2022.

Métodos: Estudio observacional, transversal y analítico, basado en el análisis secundario de la base institucional de la Dirección General de Donaciones, Trasplantes y Banco de Sangre (Digdot). De los 7 074 registros, se incluyeron aquellos correspondientes a establecimientos del Ministerio de Salud,

EsSalud, clínicas privadas y Fuerzas Armadas y Policía Nacional del Perú que contaban con información completa, y se excluyeron aquellos en los que no hubo entrevista, obteniéndose 1 668 casos para el análisis. Se analizaron factores sociodemográficos (sexo, edad y procedencia geográfica), clínicos (diagnóstico del potencial donante) e institucionales (institución generadora), además de los motivos de negativa familiar. Las asociaciones entre variables se evaluaron mediante chi-cuadrado y U de Mann-Whitney. Se estimaron razones de prevalencia crudas (RPc) y ajustadas (RPa), con intervalos de confianza al 95 % (IC 95 %), mediante regresión de Poisson con varianza robusta. El modelo ajustado incluyó las variables con asociación significativa en el análisis bivariado y plausibilidad epidemiológica.

Resultados: La aceptación familiar fue del 32,6 %. Hubo una mayor proporción de entrevistas en Lima y zonas centrales del país. Se observaron diferencias significativas según grupo etario ($p = 0,001$), con menor proporción de niños (3,9 %) entre los casos con aceptación familiar. En el análisis ajustado, se observó una mayor prevalencia de aceptación en adultos ≥ 60 años en comparación con adultos de 30–59 años ($RPa = 1,22$, $p = 0,039$, IC 95 %: 1,01–1,48). Asimismo, la prevalencia de aceptación fue menor en Fuerzas Armadas y Policía Nacional ($RPa = 0,37$, $p = 0,033$, IC 95 %: 0,15–0,92) frente a EsSalud. Los motivos principales de negativa fueron mantener la integridad corporal (38,0 %), desacuerdo familiar (19,5 %) y negativa expresada en vida (19,1 %).

Conclusiones: La decisión familiar frente a la donación en el Perú está influida por factores institucionales y creencias culturales, con diferencias según la edad del potencial donante. Fortalecer la capacitación del personal sanitario, promover la información pública y desarrollar estrategias sensibles a la edad del potencial donante son pasos clave para reducir las tasas de negativa y mejorar la disponibilidad de órganos en todas las etapas de vida.

Keywords: Actitud Frente a la Salud; Muerte Encefálica; Obtención de Tejidos y Órganos; Sistemas de Salud; Toma de Decisiones Conjunta (Fuente: DeCS)

INTRODUCTION

Organ donation and transplantation constitute one of the most relevant medical interventions in public health, as they offer an effective and cost-effective therapeutic alternative for patients with end-stage solid-organ diseases (1,2). In recent decades, procurement and transplantation systems have been strengthened through regulatory frameworks, professional training, and educational campaigns, achieving sustained increases in the rate of donors per million population; for example, Spain has maintained figures above 40 donors per million in recent years (1), whereas in Latin America, Uruguay, Brazil, Argentina, and Colombia have reached rates between 8 and 19 per million (3).

In contrast, Peru continues to have one of the lowest rates in the region (4,5). According to data from the Dirección General de Donaciones, Trasplantes y Banco de Sangre (Digdot) of the Ministerio de Salud (MINSA) (6,7), the national rate was 2.3 donors per million population in 2019, decreasing to 0.5 in 2020. Despite the existence of a regulatory framework governing the donation process, the practical implementation of these provisions has faced operational and social limitations.

In Latin America, the rate of family refusal of organ donation shows marked heterogeneity across countries, ranging from 28% in Uruguay to as high as 70% in Peru, reflecting one of the highest proportions of family refusal in the region (8). The main reasons reported include distrust in the healthcare system, religious beliefs, and other myths associated with donation (9).

According to MINSA, nearly 7,000 people are waiting for a transplant to survive or recover their health, but the number of donors remains far below demand. In this context, the approval of the regulations of Law No. 31756 in June 2025 represents a significant advance in promoting the donation of human organs and tissues for therapeutic purposes, to increase organ availability and reduce waiting lists nationwide (10).

Within this framework, the general objective of the present study was to analyze family decision-making regarding organ donation in Peru. Specifically, the study aimed to identify the sociodemographic, clinical, and institutional factors associated with family acceptance of organ donation; describe the reasons for refusal reported by families of potential donors cared for in public and private healthcare facilities between 2014 and 2022; and examine the distribution of family acceptance according to geographic region and donor-generating institution. These results aim to provide updated evidence that contributes to understanding this phenomenon in its national context and to guiding effective strategies for promoting donation in Peru.

METHODS

Study design

An observational, quantitative, cross-sectional study with descriptive and analytical components was conducted, based on a secondary analysis of data from the institutional database of Digdot of MINSA. Digdot is responsible for coordinating procurement and transplantation activities nationwide and for administering the database of potential donors identified in public and private healthcare facilities where family interviews were conducted.

Population and sample

The original database included 7,074 records of potential donors identified between 2014 and 2022, along with the final decisions recorded during family interviews in which consent for organ and tissue donation was requested.

The study population consisted of relatives of potential organ and tissue donors cared for in facilities of MINSA, EsSalud, private clinics, and Fuerzas Armadas y Policía Nacional del Perú (FFAA-PNP) between 2014 and 2022.

The database record unit was the potential donor, whereas the unit of analysis was the family or the family member responsible for the donation decision. Records of potential donors who had a family interview conducted by healthcare personnel and had complete information for the relevant

study variables were included. Records without a family interview were excluded because they did not allow the donation decision to be determined. Finally, 1,668 records were included in the analysis.

Variables

Sociodemographic, clinical, and institutional factors were analyzed to assess their association with family decision-making regarding donation. Sociodemographic factors included age, sex, and geographic origin; clinical factors included the potential donor diagnosis; and institutional factors included the donor-generating institution. In addition, among cases of family refusal, the recorded reasons were analyzed and classified according to the predefined categories in the database, which included preservation of bodily integrity, family disagreement, refusal expressed while alive, religious reasons, and others.

The age of potential donors was categorized into age groups: children (<12 years), adolescents (12–17 years), young adults (18–29 years), adults (30–59 years), and older adults (≥60 years). Geographic origin was assigned according to the Peruvian region (Lima, Piura, Loreto, among others). Brain death was defined according to the diagnosis recorded in the institutional database in accordance with the clinical criteria in force in Peru.

Procedures and data collection

The data used in the study were obtained from the institutional database of Digdot of MINSA, following a formal request and authorization from the Research Ethics Committee of the Instituto Nacional de Salud del Niño San Borja.

The information recorded in the database was obtained from family interview forms used during the process of requesting organ and tissue donation. The record unit is the potential donor, whereas the unit of analysis is the family or family member responsible for the donation decision.

To protect confidentiality, identifying data were removed before analysis, and the database was kept exclusively by the principal investigator in a secure drive with restricted access for the research team.

Statistical analysis

The information was obtained in Microsoft Excel 2019 format and processed using Stata version 19 (StataCorp LLC, College Station, TX, USA) and RStudio (RStudio, PBC, Boston, MA, USA). A descriptive analysis of the variables was performed using absolute and relative frequencies, as well as measures of central tendency and dispersion for the age variable. The chi-square test (for categorical variables) and the Mann–Whitney U test (for numerical variables, after assessing the normality of the distribution) were used to evaluate the association between sociodemographic, clinical, and institutional variables and family acceptance (acceptance or refusal). To evaluate factors associated with family acceptance, a Poisson regression model with robust variance was used, estimating crude prevalence ratios (cPRs) and adjusted prevalence ratios (aPRs). Poisson regression was chosen instead of logistic

regression because the outcome of interest, family acceptance, had a proportion greater than 10%; in this situation, logistic regression may overestimate associations by producing odds ratios rather than prevalence ratios. A p -value <0.05 was considered the level of statistical significance and the criterion for entry into the adjusted analysis, in addition to epidemiological plausibility.

Ethical considerations

The study used an anonymized institutional database without personal identifiers, ensuring confidentiality and anonymity of the information. The database was provided by Digdot of MINSA, and its management for study purposes was the responsibility of the principal investigator, who stored the information on a secure drive with restricted access. The study was conducted in accordance with the ethical principles of the Declaration of Helsinki. The project was approved by the Research Ethics Committee of the Instituto Nacional de Salud del Niño San Borja (Certificate No. 066-2025).

RESULTS

Table 1 shows the characteristics of the potential donors. Of the 1,668 potential donors included in the study, 62.7% were male, and 37.3% were female. The median age was 33 years. More than half corresponded to the adult group aged 30–59 years (54.2%), followed by young adults aged 18–29 years (23.9%). Overall, 54.3% of potential donors came from Lima and Callao. The most frequent cause of potential donor identification was traumatic brain injury (41.2%). Regarding donor-generating institution, 53.4% of cases were from MINSA facilities, 33.8% from EsSalud, 11.5% from private clinics, and 1.4% from FFAA-PNP. Most potential donors had brain death (98.6%).

Table 2 shows that family acceptance of donation was 32.6% (544/1,668 families). No significant differences were observed by sex of the potential donor or geographic origin. Significant differences were observed by age group ($p = 0.001$), with a lower proportion of children (3.9%) and a higher proportion of older adults (13.2%) among cases with family acceptance, compared with cases with refusal.

Significant differences were also observed by donor-generating institution. Among cases with family acceptance, 47.6% corresponded to EsSalud, 40.4% to MINSA, 11.2% to private clinics, and 0.7% to FFAA-PNP ($p < 0.001$). This category had the fewest recorded interviews (24/1,668). Finally, most cases corresponded to brain death, a condition that was more frequent among cases with refusal than among cases with acceptance ($p = 0.001$).

After adjustment for factors associated in the bivariate analysis, older adults were observed to have a higher prevalence of acceptance compared with the adult population (aPR = 1.22, $p = 0.039$, 95% CI: 1.01–1.48) (Table 3). Regarding the donor-generating institution, family acceptance was significantly lower in MINSA (aPR = 0.71, $p = 0.004$, 95% CI: 0.57–0.90), in FFAA-PNP (aPR = 0.37, $p = 0.033$, 95% CI: 0.15–0.92), and

Table 1. Characteristics of potential donors included in the study

Potential donor characteristics	n = 1,668	%
Sex		
Female	622	37.3
Male	1,046	62.7
Age in years		
Median (interquartile range)	33 (24–50)	
Children (<12 years)	88	5.3
Adolescents (12–17 years)	116	7.0
Young adults (18–29 years)	399	23.9
Adults (30–59 years)	904	54.2
Older adults (≥60 years)	161	9.7
Origin		
Lima and Callao	905	54.3
Other regions	763	45.7
Traumatic brain injury		
Yes	688	41.2
No	980	58.8
Donor-generating institution		
Ministerio de Salud	890	53.4
EsSalud	563	33.8
FFAA-PNP	24	1.4
Private clinics	191	11.5
Brain death		
Yes	1,645	98.6
No	23	1.4

FFAA-PNP: Fuerzas Armadas y Policía Nacional del Perú.

in private clinics (aPR = 0.55, $p < 0.001$, 95% CI: 0.47–0.63), compared with EsSalud, which was used as the reference category. Likewise, potential donors with brain death showed a lower prevalence of family acceptance (aPR = 0.47, $p < 0.001$, 95% CI: 0.35–0.64). No significant associations were found with sex, geographic origin, or the presence of traumatic brain injury.

Figure 1 shows the main reasons for family refusal in relation to organ donation. The most frequent reason was preservation of bodily integrity (38.0%), followed by family disagreement (19.5%) and refusal expressed while alive (19.1%). Families

Table 2. Factors associated with family acceptance of donation

Factors	Acceptance n = 544	%	Refusal n = 1,124	%	p*
Sex					
Female	199	36.6	423	37.6	0.677
Male	345	63.4	701	62.4	
Age in years					
Median (interquartile range)	39 (25–53)		36 (23–49)		0.009**
Children (<12 years)	21	3.9	67	6.0	0.001
Adolescents (12–17 years)	41	7.5	75	6.7	
Young adults (18–29 years)	113	20.8	286	25.4	
Adults (30–59 years)	297	54.6	607	54.0	
Older adults (≥60 years)	72	13.2	89	7.9	
Origin					
Lima and Callao	296	54.4	609	54.2	0.929
Other regions	248	45.6	515	45.8	
Traumatic brain injury					
Yes	230	42.3	458	40.8	0.551
No	314	57.7	666	59.3	
Donor-generating institution					
Ministerio de Salud	220	40.4	670	59.6	<0.001
EsSalud	259	47.6	304	27.1	
FFAA-PNP	4	0.7	20	1.8	
Private clinics	61	11.2	130	11.6	
Brain death					
Yes	529	97.2	1,116	99.3	0.001
No	15	2.8	8	0.7	

FFAA-PNP: Fuerzas Armadas y Policía Nacional del Perú. *Estimated using the χ^2 test; **Estimated using the Mann–Whitney U test. Percentages correspond to the total of each column.

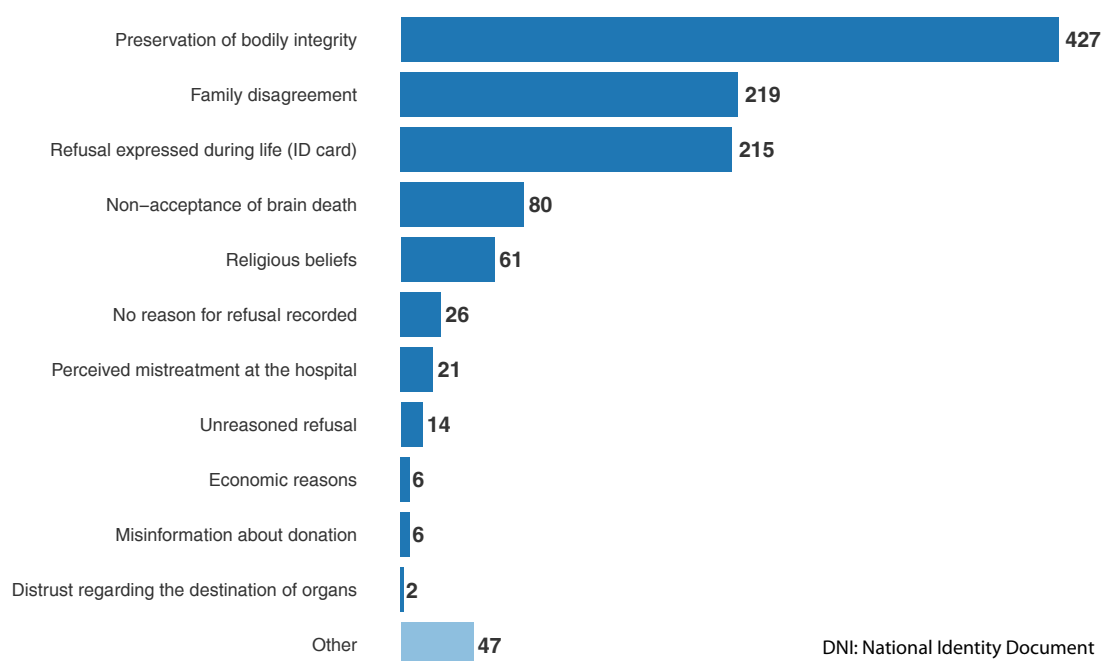
who did not accept the diagnosis of brain death (7.1%) and cases associated with religious beliefs (5.4%) were also identified. The least frequent reasons were unreasoned refusal (1.2%) and misinformation about donation (0.5%).

Figure 2 shows the distribution of interviews and family responses according to region and donor-generating institution. In MINSA, private clinics, and EsSalud, a greater presence of interviews and high or very high levels of acceptance was observed in coastal regions, particularly in Lima and in some coastal regions of the north and south.

Table 3. Factors associated with family acceptance (adjusted analysis)

Factors	Family acceptance					
	cPR	p	95% CI	aPR	p	95% CI
Age group						
Children and adolescents (<18 years)	0.93	0.503	0.74–1.16	0.99	0.953	0.79–1.25
Young adults (18–29 years)	0.86	0.110	0.72–1.03	0.96	0.642	0.80–1.15
Adults (30–59 years)	ref.			ref.		
Older adults (≥60 years)	1.36	0.002	1.12–1.66	1.22	0.039	1.01–1.48
Sex						
Female	0.97	0.678	0.84–1.12	-		
Male	ref.					
Origin						
Lima and Callao	1.01	0.930	0.88–1.16	-		
Other regions	ref.					
Traumatic brain injury						
Yes	1.04	0.551	0.91–1.20	-		
No	ref.					
Donor-generating institution						
Ministerio de Salud	0.69	0.002	0.55–0.87	0.71	0.004	0.57–0.90
EsSalud	ref.			ref.		
FFAA-PNP	0.36	0.027	0.15–0.89	0.37	0.033	0.15–0.92
Private clinics	0.54	<0.001	0.46–0.62	0.55	<0.001	0.47–0.63
Brain death						
Yes	0.49	<0.001	0.36–0.67	0.47	<0.001	0.35–0.64
No	ref.			ref.		

FFAA-PNP: Fuerzas Armadas y Policía Nacional del Perú; cPR: crude prevalence ratio; aPR: adjusted prevalence ratio; 95% CI: 95% confidence interval. Crude and adjusted prevalence ratios were estimated using Poisson regression with robust variance. The adjusted model included variables with a significant association in the bivariate analysis and epidemiological plausibility.


Figure 1. Reasons for family refusal of organ donation

In addition, a common pattern was the presence of regions that reached high or very high acceptance categories despite having few interviews (Lambayeque, La Libertad, Piura, Cusco, Junín, and Arequipa). This finding was repeated across the three subsectors. Several regions, mainly in rainforest, high Andean, or border areas, such as Amazonas, Madre de Dios, Pasco, and Moquegua, had no recorded interviews in any of the three types of institutions.

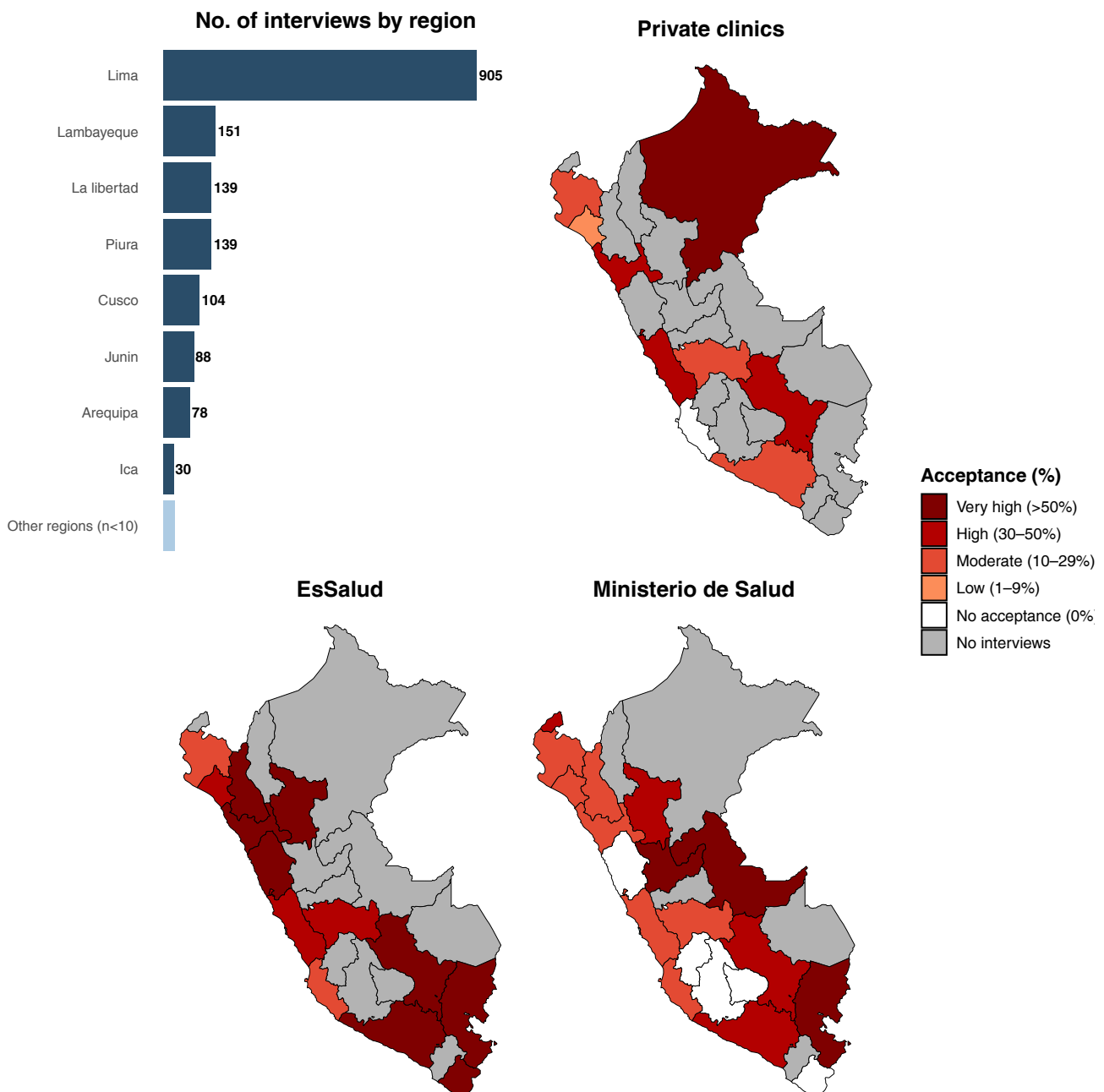


Figure 2. Geographic distribution of family acceptance according to the donor-generating institution

For this analysis, only interviews conducted in MINSA, EsSalud, and private clinic facilities were considered. Institutions of the Fuerzas Armadas y Policía Nacional del Perú were excluded because of the limited number of interviews recorded ($n = 24$).

DISCUSSION

The present study identified sociodemographic, clinical, and institutional factors associated with family acceptance of organ donation in Peru, as well as the main reasons reported by families interviewed between 2014 and 2022. The findings show an acceptance proportion of 32.6%, with a predominance of refusals related to bodily integrity, family disagreement, and refusal expressed while alive. Differences were observed by institution type, with higher acceptance in EsSalud than in MINSA, private clinics, and FFAA-PNP. These results suggest that family decision-making depends not only on individual factors but also on the institutional, cultural, and communication context.

In this study, the main reasons for refusal were preservation of bodily integrity, family disagreement, and refusal expressed while alive. These results are consistent with international studies. Similarly, Le Nobin *et al.* (11) observed in France that the most frequent reasons for refusal were the desire to preserve the bodily integrity of the deceased, the perception of death as an abrupt event, and religious beliefs; some of these factors coincide with those observed in the present study. Additionally, Pessoa *et al.* (12) in Brazil and Ghorbani *et al.* (13) in Iran identified misunderstanding or rejection of the diagnosis of brain death as a recurrent cause of refusal, which is related to the Peruvian cases in which some families did not accept the diagnosis of brain death. This finding reinforces the need to strengthen medical communication and public understanding of the concept of brain death.

The findings of this study, particularly regarding distrust of brain death and lack of information, are similar to those described by Can (14), who reports that family refusal is associated with lack of information, distrust of the diagnosis of brain death, and the influence of cultural or religious beliefs. These similarities show that, beyond regional differences, family decision-making processes regarding donation share common determinants, mainly related to the understanding of death and the symbolic representation of the body. Likewise, Viñuela-Prieto *et al.* (15) in Spain demonstrated that the interviewer's experience and training significantly influence family acceptance, which may help explain the differences observed among Peruvian institutions in this study, where EsSalud, with greater development of procurement programs, showed better results than other subsectors (16).

Family disagreement was the second most frequent reason for refusal. This finding is consistent with that reported by Neira San Martín *et al.* (17) in Chile and Zamora Torres and Díaz Barajas (18) in Mexico, who showed that willingness to donate depends on trust in the healthcare system, educational level, and prior discussion of the topic within the family. This reflects the absence of prior conversations about the potential donor's wishes, a situation also reported by Siminoff *et al.* (19), who demonstrated that families that had previously discussed the topic were more likely to authorize donation.

In the Peruvian context, the observed regional differences may be related to the concentration of complex healthcare services and transplant programs in urban areas and in

institutions with greater procurement experience. The results show a pattern of centralization of the interview and donation process in areas with higher population density, greater availability of complex healthcare services, and transplant units. Consistently, the rainforest and some high Andean regions show lower or no interview activity, whereas the coast concentrates both the number of interviews and the highest levels of acceptance. This pattern could be explained by territorial gaps in geographic accessibility, institutional capacity, patient referral, and availability of trained teams (20).

In the regression analysis, significant differences in acceptance were observed according to the donor-generating institution. These results are consistent with Molina *et al.* (21), who in Colombia reported a reduction in family refusal after the implementation of training programs for healthcare personnel in family approach and communication during the donation process. This suggests that differences between EsSalud and MINSA may be related to the level of training and experience of procurement coordinators. In Peru, Digdot has promoted institutional strengthening initiatives (22,23); however, gaps persist in the coverage and continuity of training programs, especially in regions outside Lima.

Bodily integrity was the most frequent reason for family refusal of donation. This pattern, also described by Le Nobin *et al.* (11) and Peña-Sánchez (24), reflects a deeply rooted cultural component that associates donation with alteration of the body of the deceased (25). This symbolism has been reported in various cultural contexts and suggests that awareness-raising strategies should incorporate an anthropological and educational approach that addresses perceptions of the body and death. For their part, West and Burr (26) highlighted the importance of the timing and manner in which the request is made, noting that empathy, an appropriate setting, and coordinated participation of medical personnel and procurement teams can increase family acceptance, aspects that could be strengthened in the Peruvian context.

The analysis of age differences showed that acceptance was higher when the potential donor was an older adult, which could be related to the social perception of "natural death" or to a lower emotional burden compared with the death of young people or children. Similarly, Siminoff *et al.* (19) found that patient age influenced family willingness to donate. Likewise, the absence of differences by sex or geographic origin suggests that family decision-making depends more on attitudinal and contextual factors than on demographic variables.

Regarding the limited acceptance of donations in children and adolescents, which was approximately 30% in this study, this situation reduces the availability of compatible organs for pediatric recipients and highlights the need for communication strategies that consider the age of the potential donor and incorporate psychological support and family guidance during the interview. In this regard, strengthening public understanding of the possibility of organ donation in the pediatric population and the impact of these transplants on the survival of other children may help reduce this gap and consolidate a more supportive and informed culture of donation.

In Peru, institutional reports from EsSalud (27) point to the need to promote a culture of voluntary donation among the Peruvian population, highlighting the gap between the high likelihood of requiring a transplant and the low rate of effective donation (1.5–2 per million population). These data, together with the findings of the present study, underscore the urgent need to strengthen communication campaigns that promote informed decision-making and expression of wishes during life, as well as the training of healthcare professionals in family interview techniques.

In the present study, the diagnosis of brain death was associated with a lower prevalence of family acceptance in the adjusted model. However, this finding should be interpreted with caution because of the high prevalence of this condition in the sample (98.6%), which reduces the variability of the variable and may influence the stability of the estimate. Nevertheless, the observed association could reflect persistent difficulties among families in understanding and accepting the diagnosis of brain death, an aspect widely described in the international literature.

The implications of these findings are relevant for the design of public policies. As suggested by Molina *et al.* (21) and Neira San Martín *et al.* (17), continuing education for healthcare personnel, inclusion of the topic in university training, and interinstitutional coordination are effective strategies to improve acceptance rates. In Peru, the evidence presented may guide the implementation of regional procurement programs, prioritizing regions with low interview coverage and strengthening the presence of coordinators trained in communication and cultural skills.

Among the limitations of the study, the secondary nature of the data should be acknowledged, as this could imply underreporting of some reasons for refusal. In addition, information on interviewer characteristics and the conditions of the interview setting was not available, variables that in other studies have shown significant influence on family decision-making (15,26). However, the broad temporal and national coverage of the database used represents a strength that provides an overview of the Peruvian context during the study period.

The study also included only records of potential donors whose families had an interview and who were documented in the institutional Digidot database. This condition could introduce selection bias, as it excludes institutions without recorded procurement activity or those with underreported interviews, which could limit the national representativeness of the results and lead to overestimation or underestimation of true family acceptance rates. Moreover, because an analysis by year was not performed, these proportions may have been affected by temporal variations, including the COVID-19 pandemic.

In conclusion, family acceptance of organ donation in Peru was significantly associated with the age of the potential donor, the donor-generating institution, and the diagnosis of brain death. Higher acceptance was observed among older adults and in EsSalud facilities. In contrast, acceptance was lower in MINSA facilities, private clinics, FFAA-PNP, and

cases involving brain death. The main reasons for refusal were preservation of bodily integrity, family disagreement, and refusal expressed while alive. These findings highlight the importance of strengthening institutional and communication strategies adapted to the context and age of the potential donor to improve acceptance rates. Educational campaigns aimed at addressing the perception of bodily integrity and promoting the expression of wishes during life are also recommended.

Author contributions

AAR, AST, MBL, and BEGC: Conceptualization, Methodology. AAR and AST: Resources. BEGC: Data curation, Formal analysis. AAR, AST, MBL, and BEGC: Supervision, Writing – review and editing. All authors approved the final version of the manuscript.

Conflicts of interest

The authors declare no relevant financial or non-financial conflicts of interest.

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Data availability

The data supporting the findings of this study are available upon request from the corresponding author.

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