scientific reports



OPEN

Emotional dimension associated with the migratory experience of adult refugees and asylum seekers

María José Cáceres-Titos^{1⊠}, Ana María Fernández-Araque^{2,4} & E. Begoña García-Navarro^{1,3,4}

This study explores the impact of the migratory process on the mental health of refugees and asylum seekers arriving in Spain. It examines the feelings and emotions associated with emigration, alongside its underlying causes. A mixed-methods approach was followed, collecting quantitative data through a questionnaire composed of the validated Migratory Grief and Loss Questionnaire, and sociodemographic and cultural factors (n = 126). Qualitative data were gathered through 14 semi-structured interviews and 2 focus groups (n = 34). Key factors influencing migratory grief include nationality, gender, age, legal status, and length of residence. Impotence and the pact of silence with their family regarding their current situation emerged from analysis as the emotional factors associated with migration. Effective migration interventions should address not only practical aspects but also emotional and sociodemographic dimensions. This includes providing adaptive support programs that impact identity to promote healthy and sustainable adaptation to the destination country.

Keywords Migration, Refugees, Asylum seekers, Mental health, Migratory grief

The recent refugee crisis experienced in Europe has prompted a deeper and more complex examination of migratory and refugee flows. The migratory experience of refugees and asylum seekers is profoundly shaped by a range of interconnected factors, such as gender, age, ethnicity, social class, educational level, and migratory status. These factors do not operate in isolation, but intersect, generating specific dynamics of vulnerability and resilience. The intersectionality framework provides a valuable analytical lens to understand how these multiple dimensions shape the emotional tensions and challenges faced by migrants, acknowledging the complexity of their experiences and specific needs¹

In this context, it is essential to recognize that everyone possesses a history, a culture, and values that directly influence their perception of health and well-being². These intrinsic characteristics interact with the intersecting dimensions of identity and lived experience, further shaping individuals' emotional responses and their capacity to navigate the challenges of forced migration.

The interaction between the individual needs and the globally accepted concept of health by society and healthcare institutions can generate tensions and challenges. The importance of recognizing and respecting this intersection is magnified in the context of immigration, which causes a reconfiguration of individual needs, as migrants must adapt to new cultural, social, and health realities. In the case of asylum seekers, there is an additional vulnerability associated with the fact that they are awaiting the protection granted to those who have refugee status, facing restrictions in various areas that can be considered degrading, punitive, and inhumane³. Therefore, the reconciliation between their values and the demands of the host society adds a layer of complexity to achieving well-being, as they face numerous losses during this process of change.

Although all forms of grief involve loss, migratory grief is distinguished by its partial nature, as it is not about the disappearance of the country, family, or society that once formed part of the individual's identity, but rather the experience of separation in terms of space and time gives this type of grief a recurring and non-definitive character. Additionally, these losses can encompass changes in family structure, language, culture, homeland, social status, group belonging, and the physical risks associated with displacement. The multiplicity of losses increases the likelihood of grief becoming what Achotegui⁴ terms complicated and even extreme, leading to

¹Faculty of Nursing, University of Huelva, Avenida de las Fuerzas Armadas, S/N, 21007 Huelva, Spain. ²Research Group "Pharmacogenetics, Cancer Genetics, Genetic Polymorphisms and Pharmacoepidemiology", Faculty of Health Sciences, University of Valladolid, 47002 Soria, Spain. ³Center for Research in Contemporary Thought and Innovation for Social Development (COIDESO), Avenida de las Fuerzas Armadas, S/N, 21007 Huelva, Spain. ⁴Ana María Fernández-Araque and E. Begoña García-Navarro contributed equally to this work. [⊠]email: mariajose.caceres@denf.uhu.es

the immigrant syndrome of chronic and multiple stress, or Ulysses syndrome^{5,6}. This syndrome manifests multidimensionally, involving emotional distress accompanied by numerous personal losses. Furthermore, this distress is closely related to the development of physical symptoms, given the link between emotional psychophysiological activation and organic and psychological consequences⁶.

In this regard, the most vulnerable group among immigrants is that of refugees and asylum seekers, who suffer from high levels of distress⁷. Additionally, the involuntary abandonment of their country of origin and the circumstances surrounding this fact⁶, make them more vulnerable to mental health problems⁸ and they face many difficulties in integrating into the host country⁹. However, the rates of seeking help for mental health issues are low among refugee communities⁹.

As a result, these individuals may experience symptoms such as anxiety and depression, manifested in sadness, crying, tension, nervousness, headaches, irritability, insomnia and fatigue. They may also develop psychosomatic disorders, where emotional distress is physically expressed through imaginary ailments, reflecting the somatization of their underlying problems, significantly affecting their overall health and well-being¹⁰. This situation poses a challenge for exploration and intervention, running the risk of being overdiagnosed with personality disorders and other pathologies by confusing coping symptoms with pathological defence mechanisms¹¹. Additionally, differences in culture, diagnostic criteria of the country where they are treated, or language can influence clinical care and treatment¹².

In 2019, Spain received more international protection tan any other year since the approval of the fitst Asylum Law in 1984, with a total of 118,264 applications¹³. Having granted refugee status to 5.2% os these applicants, Spain is well below the European Union average in this regard, which grants this status to 31% of the applications it receives¹³. This situation is a significant stressor that complicates the circumstances. It has been demonstrated that these individuals find it challenging to adhere correctly to treatment as they are continuously in a state of alert due to stressors after migration¹⁴.

Therefore, although migratory grief has been analyzed from various perspectives, it is not often studied with a focus on the individual, commonly concentrating on exploring the political, economic, or sociodemographic consequences that the process generates¹⁵. Although the emotional well-being and support of refugees and asylum seekers in Spain is beginning to attract interest¹⁶, this study aims to address this phenomenon from a more personal, biographical perspective, through personal, racial, cultural, and ethnic identity, considering the emotional burden that each refugee and asylum seeker carries due to the fact that they migrate forcibly, knowing that, in many cases, there may be a possibility of no return.

Unlike voluntary migrants, who may have the option to choose their destination and plan their migration, refugees and asylum seekers face a series of exceptional emotional, psychosocial, and adaptation challenges during their migration process, which determine their emotions and behaviors. For this reason, this study aims to understand how they feel, what situations they face, and what personal resources they must cope with them.

To this end, to provide holistic care that addresses not only physical health but also the emotional and psychological needs of these vulnerable populations, the general objective was to identify the main emotional challenges experienced by refugee or asylum-seeking migrants arriving in the last 2 years and to determine the factors contributing to that emotional distress. The specific objectives focused on exploring coping strategies for dealing with adverse situations, as well as support needs from a comprehensive approach.

Methods

Study design and setting

The methodological approach employed was a mixed-methods study, combining quantitative and qualitative approaches. This allows for addressing the complexity of the experiences of refugees and asylum seekers from complementary perspectives. The quantitative approach, through a cross-sectional descriptive study, provides data to identify patterns and general trends within the studied population, such as risk factors associated with emotional distress. On the other hand, the qualitative approach, based on phenomenology and semi-structured interviews, delves into the subjective experiences and personal narratives of participants, offering a contextualized understanding of the emotional challenges they face. This comprehensive approach is particularly appropriate for this population, as it ensures a holistic understanding of their emotional challenges and needs. COnsolidated criteria for REporting Qualitative research (COREQ) guidelines was following ¹⁷. The Consolidated Criteria for Reporting Qualitative Research (COREQ) guidelines provide a comprehensive framework designed to enhance the transparency and quality of qualitative research reporting. These criteria cover various aspects, including the research team, study design, data analysis, and findings, ensuring that essential information is communicated clearly to readers.

Study participants

For the quantitative approach, a survey study was conducted with a sample of 126 individuals (60 men and 66 women), during the first 6 months of 2023. For the qualitative approach, we used purposive sampling; although we initially attempted to achieve a representative sample by nationality, due to access difficulties, we decided to use snowball sampling. This sampling is particularly effective in contexts where participants belong to vulnerable groups and may not be easily identified through more conventional sampling methods¹⁸.

The final sample size was determined by the principle of data saturation¹⁹. The general inclusion criterion for both approaches included adults from any country other than Spain who were refugees or asylum seekers in the southwest of Spain, during the past 2 years, and who had been identified by the psychological office of the NGO (the recruitment entity) as patients at risk of emotional distress. These individuals must have experienced some emotional instability following their migration process.

The Southwest of Spain was chosen as the geographical context for this study due to its strategic and significant role in migratory flows toward Europe. Furthermore, this study is part of a broader project aimed at exploring migratory grief among various vulnerable populations within this context.

The analysis was limited to the first 2 years because this period typically coincides with the time it takes to process asylum applications and may even last up to 3 years. During this time, migrants are often in a situation of legal uncertainty, and the process of acculturation has not yet advanced. For this reason, this stage influences their emotional and psychological experiences as they navigate challenges related to legal status and integration²⁰.

Data collection

For the quantitative study, the administered survey consisted of a set of sociodemographic data along with a scale revised by Achotegui et al.²¹, adapted into Spanish by Revilla et al.²² from the previous "Migratory Grief and Loss Questionnaire" (MGLQ)²³. It was validated and had a Cronbach's Alpha consistency of 0.72. It consists of 17 questions designed to measure the intensity of grief and loss associated with migration, asking how often the participant experienced such feelings in the past 30 days. The questions are grouped around the four main factors of migratory grief: fear, nostalgia, worry, and loss of identity. Participants responded using a 4-point Likert scale. The questionnaire was completed online via Google Forms©, after reading and accepting the information sheet and informed consent, which facilitated its dissemination. Participant recruitment was carried out through the non-governmental organisation "Red Cross NGO", which acted as an intermediary by contacting potential participants and providing information about the study, whose participation was completely voluntary.

Those who voluntarily expressed their explicit consent to participate, either by email or telephone, were included in the study. Finally, two individuals who initially expressed interest in participating did not do so due to time constraints. Since the survey was validated in Spanish, this was the language in which the interview was conducted. Possible translation and interpretation issues were resolved thanks to our work team, which included intercultural mediators who ensured not only literal translation but also cultural translation of the questions' meaning. Based on the results obtained from this questionnaire, we further explored the meaning of their responses through a qualitative study. For this purpose, we created a semi-structured interview guide, involving intercultural mediators throughout the process.

A phenomenological qualitative semi-structure interview protocol was designed to obtain a personal perspective and narrative of resettlement experiences related to the following research question: "What emotional challenges do refugee or asylum-seeking migrant arriving in the last 2 years face?". Interviews were conducted in a neutral environment, being recorded both in audio and video once informants gave their informed consent. It allowed us to focus on the verbal content and nuances of participants' responses, while video recordings provided valuable non-verbal cues, such as body language and facial expressions, which enriched the contextual understanding of their experiences. This combination was particularly important for accurately interpreting the emotional and subjective dimensions of the narratives. Additionally, none of the participants opposed being recorded.

Before the interview, participants received an information sheet that included details about the study's purpose, why they had been invited to participate, confidentiality, and the voluntary nature of their participation. The research team listened to recordings and read interview transcripts to make an initial cursory interpretation. This provided a general idea that supported a deeper analysis (this involved the identification of relevant recurring themes, the search for similarities and differences between themes to develop codes—dimensions—and, with these, thematic categories). The presence of coinciding codes—dimensions—by different researchers—blind analysis—indicated that the analysis reached the core and revealed the meanings of the phenomenon under study.

The population selected for the study aligns with the universe of individuals who meet the established inclusion criteria. This ensures that the participants are representative of the experiences of refugees and asylum seekers in the southwest of Spain who have faced emotional instability following their migration process. For this reason, the qualitative informants were part of the initial quantitative study.

To ensure validity and reliability, the entire coding and discourse analysis²⁴ process was independently conducted by three members of the research team. One of these members was external to the research and participated as a contact bias control by only engaging in data analysis. Discrepancies were discussed until consensus was reached. This triple-blind approach aimed to minimise the implicit bias of physical contact between actors.

While one researcher conducted the interview, another handled technical aspects and assumed the observer role, taking field notes. A total of 14 in-depth interviews and 2 focus groups were conducted. The decision to conduct focus groups was driven by the need to create an interactive space where participants could express and compare their collective experiences of migratory grief. This technique allowed us to capture nuances and shared meanings that might not have emerged in individual interviews.

The combination of these techniques enriches qualitative research, providing a deeper and more complete understanding of the phenomena studied²⁵.

The research team moderated the group discussion and conducted interviews. Interviews lasted approximately 40 min (ranging from 30 to 60 min). This analysis allowed for a deeper understanding of the most relevant aspects for developing the interview guide and the central question of the focus groups. The date and time for the interviews and focus groups were agreed upon between the researchers responsible for conducting the sessions and the participants. The selected space was the "Agora aula", a neutral and open classroom at the university designated for hosting external guests. This location was accepted by both the participants and the recruiter. It is important to note that participants were not compensated for their involvement in the study. This decision was made to ensure that participation was voluntary and free from external incentives, which could potentially influence their responses and compromise the integrity of the data collected²⁶.

Data analysis

Quantitative and qualitative data were linked through a convergent mixed methods design, which allows for analysis of how the interactions between individual, social and structural contexts influence the emotional experiences of refugees and asylum seekers. Quantitative data, collected through structured surveys, provided a statistical overview of trends and patterns within the population studied.

In this study, a quantitative analysis was carried out with the aim of describing the migration variables and exploring the associations between these variables and the dimensions related to migratory grief, specifically nostalgia, worry, identity and fear. The analysis was developed in the following stages: (a) Description of variables by conducting an initial descriptive analysis to characterise the socio-demographic and migration variables of the participants (such as age, gender, country of origin, time since migration, and asylum status). This analysis included measures of central tendency (mean, median) and dispersion (standard deviation, range) for continuous variables, and frequencies and percentages for categorical variables. This stage sought to provide a general overview of the population studied. (b) Analysis of the dimensions of migratory grief: The factors of nostalgia, worry, identity and fear were assessed using a validated questionnaire. To identify patterns and relationships between these dimensions, responses were grouped into categories previously defined in the instrument. Subsequently, average scores per dimension were calculated in order to compare socio-demographic groups.

As hypothesis tests for associations to determine whether there were significant differences in the dimensions of migrant grief between the different socio-demographic groups, analysis of variance was used. This technique allowed comparison of the means of each dimension across specific categories (e.g. gender, age, or length of residence in the receiving country). The selection of ANOVA as a method was justified because it allows us to analyse whether differences between groups are larger than would be expected by chance. This method is appropriate when the dependent variables are continuous and the independent variables are categorical.

Although the original questionnaire contained 17 questions, only 12 were reported because of their direct relevance to the specific objectives of the study. This selection criterion was based on the relevance of these questions to address the key dimensions of migrant grief and coping strategies (Table 3). This analysis was applied to the four factors measuring migratory grief, using the statistical package SPSS v29.0.

This approach was selected because it allows us to identify patterns in the data that reflect the emotional experiences of migrants, relate these patterns to socio-demographic factors to better understand how these variables influence migratory grief, and provide quantitative evidence to complement a more in-depth qualitative analysis, strengthening the validity of the findings, which was done below.

Following the literal transcription of interviews and discussion groups, qualitative analysis was conducted based on the model outlined by Taylor-Bogdan²⁴. The aim was to understand the perceptions and lived realities of our study group. Once their discourses were studied, their human responses were analysed. This approach allows us to understand the subject's emic perspective, meaning their perceptions, feelings, and thoughts. It was based on their testimonies, rich with meanings, symbols, intentions, motives, and beliefs. The triangulation of the two approaches ensured greater validity and reliability, as the quantitative results were contextualised and enriched by the nuances provided by participants' individual experiences and perceptions. This holistic approach allowed for a deeper and more nuanced understanding of the phenomenon.

During this phase, a deductive coding process was followed, drawing from the obtained information and its classification into dimensions, categories, and subcategories. Participants were assigned an alphanumeric reference number (RE), used for data recording and the development of the mentioned categories and subcategories. These served as the basic unit of analysis, composed of several lines or phrases that conveyed a central idea extracted from the interviews. Preliminary categorisations were performed manually using the software Atlas.ti.v.23 Scientific Software Development GmbH, Berlin, Germany.

Results

In terms of geographical origin, the sample is predominantly composed of individuals from Latin America, followed by participants from Africa and Western Europe/Asia, indicating a rich cultural diversity (Appendix A). Gender distribution is balanced, with equal representation of men and women. Additionally, the analysis shows that nearly half of the participants do not have children.

The duration of the migratory journey is particularly noteworthy, as more than half of the respondents reported journeys lasting over 6 months. These extended journeys are often associated with a broad range of personal and emotional experiences. The majority of participants are young adults with secondary or university-level education. Notably, although over one-third of the sample speak Spanish as a native language—primarily those from Latin America—nearly one-third report needing to improve their language skills.

The qualitative component of the study was conducted through semi-structured interviews with 34 refugees and asylum seekers (20 women and 14 men), aged between 18 and 56 years. Participants were distributed across 14 individual interviews and 2 focus groups of 10 participants each. To ensure anonymity, responses were coded using the initials "RE" followed by the interview number. Thus, "RE1–14" denotes individual interviews and "RE15–35" refers to focus group participants.

Thematic analysis of the interviews revealed three overarching lines of argumentation that structure the participants' narratives: (1) complexity and emotional suffering, (2) expectations, and (3) coping strategies. These themes offer a comprehensive understanding of the emotional and psychological dimensions of the migratory experience (Table 1). Each theme is organized into categories and subcategories that reflect the diverse range of experiences described by the participants.

The first theme, complexity and emotional suffering, encompasses emotions such as fear, nostalgia, worry, and identity loss. These are linked to challenges including insecurity, future uncertainty, cultural and legal barriers, and attachment to the home country. For example, concerns about preserving traditions and maintaining family

Line of argument	Categories	Subcategories
		Insecurity
	Fear	Uncertainty/ instability
		Migratory project (motive and journey)
		Link with places and objects
		Melancholy and longing
	Nostalgia	Attachment to one's country
		Preservation of traditions
		Love for one's country
		Country situation
Emotional complexity/suffering		Family wellbeing
Emotional complexity/sunering	Concern	Legal and administrative barriers
	Concern	Repatriation
		Death
		Ethnocentrism of care
		Loss of cultural connections (language)
	Loss of identity	Adaptation to the new values system
	Loss of identity	Redefinition of identity
		Changes to self-identity and self-concept
	Imm otom co	Cause of exile
	Impotence	Discrimination
		Legal status
	Desire to remain in the reception country	Financial stability
Expectations		Educational opportunities
	Desire to return	Pact of silence
	Desire to return	Guilt
	Social interaction	Social support
	Social interaction	Participation in the community
Coping strategies		Self-care
	Wellbeing	Religiousness
		Spirituality

Table 1. Description of the lines of argument, categories, and subcategories produced after analysis.

bonds reveal the emotional depth of these challenges. The second theme, expectations, highlights participants' aspirations, such as remaining in the host country, achieving financial or educational stability, or, in some cases, returning to their country of origin. A notable subtheme is the "pact of silence," reflecting participants' reluctance to fully disclose their struggles to their families, which adds emotional strain. The third theme, coping strategies, includes personal and community resources that help participants navigate adversity. Subcategories such as social support and spirituality illustrate how individuals rely on interpersonal relationships, religious practices, and self-care strategies to preserve emotional well-being.

Analysis of variables pertaining to migration in the studied sample (n=126) provides a detailed view of the experiences and feelings experienced by participants about their migratory process (Appendix B).

The results indicate that almost 40% of the participants experience distress during their migratory process, feeling quite or extremely distressed. This finding is supported by the qualitative testimonies, where participants describe the complex emotions associated with migration. RE5: "Anguish is a constant feeling; it feels like an emotional burden we carry with us. Missing home and facing the unknown here generates a lot of anxiety". Among the reasons, explaining this distress is the inability to maintain their country's traditions. Another reason could be the complexity of their emotional relationship with their country of origin. Although 66% show considerable attachment, 57.3% express high concern and feelings towards their country of origin, revealing a duality of sentiments where love for the country of origin coexists with worry about its situation. RE9: "I love my country, but I feel a deep helplessness seeing how it is. Not being able to do anything is very hard. I cannot go back; it is not an option".

47.7% of participants experience a sense of helplessness due to the cause of their exile. The testimonies reinforce this experience, describing how the obligation to leave the country generates a sense of helplessness, also often associated with situations of discrimination. However, despite this feeling, 73.8% do not express an immediate desire to return permanently to their country of origin in the future. This high figure may be associated with the fact that most (86.5%) migrate with a family member and/or close friend, although almost half of the participants (54.8%) have close family and/or friends still residing in their country of origin.

Before conducting ANOVA analyses, assumptions of normality and homogeneity of variances were tested. Shapiro–Wilk tests confirmed normal distribution of residuals (p > 0.05), and Levene's tests showed homogeneity

of variances across groups (p > 0.05). Additionally, 95% confidence intervals are reported where appropriate. To understand the influence of sociodemographic variables on the triggering of migratory grief, an association analysis was conducted between these variables and the factors of migratory grief (Table 2). A significant relationship between nationality, age, legal status, and length of residence with the other factors of migratory grief is highlighted.

The correlation analysis identified significant associations between sociodemographic variables and the dimensions of migratory grief, as indicated by asterisks in the corresponding tables. These findings should be interpreted with caution, as they reflect associative patterns rather than causal relationships. Moreover, several of the correlation coefficients indicate only modest strength. The most relevant findings can be grouped into three key areas.

The first aspect is age and Length of Stay in the Host Country. The duration of residence shows a significant positive relationship with the "Fear" factor (R=0.22, p=0.01), with shorter stays being associated with higher levels of fear. Temporary protection, compared to international protection, also increases fear (R=-0.20, p=0.03). The second is Loss of Identity. Being male is modestly associated with a greater sense of identity loss (R=0.19, p=0.04). International protection may serve as a protective factor, with lower identity loss reported among those granted international protection compared to temporary protection (R=0.21, p=0.02). Additionally, participants who are married or divorced and those with secondary education show higher scores on identity loss. It is important to note that these associations are moderate in magnitude, and no causal inferences should be drawn. Finally, the Language Proficiency and Concern. Higher language proficiency is modestly associated with increased emotional concern. This finding could reflect greater awareness of legal and social challenges among more linguistically proficient individuals, though alternative explanations may also account for this relationship. Again, these associations should be considered in light of their limited statistical strength. These findings underscore the nuanced ways in which sociodemographic factors intersect with the emotional dimensions of migratory grief.

Regarding migratory variables, the results in Table 3 reveal four specific patterns: fear and connection to the country of origin, nostalgia and the desire to return, concern and accompanied migration, and finally, relevant testimonies. Fear is significantly associated with missing one's country (R=0.25, p<0.01), dreaming of returning (R=0.26, p<0.01), and worrying about the country and its people (R=0.20, p=0.02). These findings suggest that fear intensifies with emotional attachment and a persistent connection to the place of origin. Nostalgia is positively associated with dreaming of returning (R=-0.29, p<0.01) and negatively associated with the desire to return permanently (R=-0.24, p=0.01). This indicates that nostalgia may be an ambivalent emotion, oscillating between the longing to return and the resignation to the impossibility of doing so. With regard to concern and accompanied migration, migrating with a family member or close friend significantly reduces concern (R=-0.19, p=0.03).

The testimonies from interviews complement the quantitative data by highlighting personal experiences, such as legal uncertainty, with one participant stating, "This waiting without knowing a date [...] is terrifying. I cannot return to my country" (RE10). Economic impact is another significant theme, as low-paying jobs generate frustration and concerns about survival. Additionally, many individuals describe feelings of silence and loneliness, expressing a reluctance to share their emotions with family members to avoid causing them worry. These findings underscore the complex interplay between emotional experiences and external circumstances in shaping the challenges of migration.

In terms of identity loss, the analysis reveals statistically significant but modest associations with gender and type of protection. Being male is related to a higher likelihood of experiencing identity loss (p<0.04), while those under international protection tend to report less identity loss compared to individuals with temporary protection (p<0.02). Marital status, educational level, and language proficiency are also associated: being married or divorced, having secondary education and intermediate language proficiency are linked with higher levels of identity loss. However, these findings must be interpreted with caution given the non-experimental design and the correlation coefficients' modest magnitude.

Participants often feel that they are a risk or burden to their loved ones, both in their country of origin and in the host country. They also experience guilt for not being able to resolve their situation, which remains marked by poverty, persecution, and conflict. This separation leads to feelings of abandonment. RE9: "Now I know that my mother is alive, because not long ago I didn't know anything about her, as she doesn't have a telephone I didn't know if she had died there, I feel that I have left her alone".

In terms of identity loss, the analysis reveals significant correlations with gender and type of protection. Being male increases the likelihood of experiencing identity loss (p<0.04), and those with international protection tend to experience less identity loss compared to those with temporary protection (p<0.02). Marital status, educational level, and language proficiency are also significantly correlated, so that being married or divorced, having secondary education and intermediate language proficiency are related to a greater loss of identity associated with the migration process.

On the other hand, the lack of desire to return is associated with being accompanied by these relatives, as well as the anxiety of facing an unknown future, especially in relation to migratory status, which causes a lack of stability and clarity in legal and administrative terms, as it enhances the self-perception of unproductiveness and failure in the migratory project. The jobs for which these people are eligible until they are legal are mainly agricultural works, cleaning or as carers, with minimum wages that are insufficient to pay for necessities such as housing, food or electricity, which is a source of considerable concern and frustration. RE12: "Uncertainty about the future is something that is always present. I don't know what fate has in store for me and this makes me a bit scared, but I hope that everything goes well, both for me and for my family". RE11: "Today, for example, I worked for an hour as a cleaner, the hour is paid at 5 euros" "But imagine that I earn 300 euros a month, how are we going to survive with two children".

	Fear			Nostalgia	a		Concern			Identity		
Variables	~	95% CI	p-value	В	95% CI	p-value	~	95% CI	p-value	В	95% CI	p-value
Age	-0.09	[-0.64, 0.45]	0.34	0.12	[-1.56, 0.62]	0.20	-0.13	[-1.62, 2.15]	0.15	0.10	[-1.89, 0.03]	0.25
Children	90.0	[-1.14, 0.84]	0.52	0.14	[-0.04, 1.64]	0.11	0.07	[-0.19, 0.49]	0.46	- 0.06	[0.28, 0.46]	0.53
Sex (Male, Female)	90.0	[-0.84, 0.39]	0.48	0.05	[-0.78,-0.48]	09.0	- 0.08	[-5.81, 1.80]	0.40	0.19*	[-1.38,-0.36]	0.04
Marital status (Married/Cohabiting, other)	0.07	[-3.47, 3.49]	0.43	0.11	[-9.33, -0.50]	0.22	0.16	[-0.19, 0.49]	0.08	- 0.05	[-1.82, -1.65]	0.61
Age groups (18–20, 21–30, 31–40, 41–50, >50)	-0.10	[-1.48, 1.21]	0.29	0.10	[-3.41, 1.45]	0.29	-0.15	[-1.62, 2.15]	60.0	0.14	[-2.01, 2.22]	0.13
Educational level (Low, Medium, High)	0.01	[-1.14, 0.68]	0.89	0.01	[0.25, -0.58]	0.92	-0.16	[-0.10, 1.26]	0.08	60.0	[-1.13,-0.03]	0.33
Reason for migration	-0.05	[-2.45, 3.63]	0.59	0.03	[-6.24, 5.49]	0.70	0.12	[-5.72, 0.36]	0.20	0.03	[-8.46, 7.56]	0.73
Means of arrival	-0.07	[-0.26, 2.67]	0.46	-0.09	[-4.32, 0.37]	0.31	0.07	[-2.92, 1.44]	0.45	-0.14	[-4.27, 0.90]	0.12
Residence time	0.22**	[-2.26, -0.31]	< 0.01	-0.17*	[-0.51, 1.68]	0.05	0.17*	[-0.35, 0.89]	0.05	- 0.05	[-1.26, 0.73]	0.58
Duration of travel 0	00.0	[-0.80, 2.42]	1.00	0.03	[-2.89, 0.11]	0.74	0.03	[-1.83, 0.56]	0.74	60.0	[-2.98, 0.33]	0.34
Protection phase (Application, Approved, Other)	0.16	[-3.47, 3.49]	0.07	-0.05	[-1.49, 0.45]	0.54	0.13	[-1.86, 0.30]	0.16	- 0.06	[-0.09, 2.16]	0.49
Type of protection (international protection, temporary protection)	-0.20*	[0.09, 1.44]	0.03	0.05	[-0.85, 0.45]	0.55	-0.11	[-0.24, 1.09]	0.22	0.21*	[-1.64, -0.11]	0.02
Language level	-0.14	[-1.48, 1.68]	0.13	0.00	[-1.76, -1.14]	96.0	0.02	[-0.35, 3.03]	0.81	- 0.05	[-1.89, 0.03]	0.56

Table 2. Correlations between sociodemographic characteristics and dimensions of migratory grief. *Correlation is significant at the 0.05 level (2-tailed).

**Correlation is significant at the 0.01 level (2-tailed). Dichotomous variables were coded as follows: Sex (0 = Male, 1 = Female), Marital status (0 = Married/Cohabiting, 1 = other), Reason for migration (0 = Forced, 1 = other), Type of protection (0 = International, 1 = Temporary).

In addition to the legal situation, the loneliness they experience and the social support they receive-yet feel burdened or dependent on- are factor that contribute to ongoing stress and uncertainty. These factors, in turn, intensify emotional suffering during the migration and integration process. The result is an environment marked by anxiety and fear, often linked to traumatic experiences and conflicts. This creates a "pact of silence", where individuals are unable to open up or discuss their quality of life in Spain, either with their family members or within the host community. Most informants shared their reluctance to communicate their true feelings to their loved ones, especially their mothers, for fear of worrying them. They expressed the difficulty of finding the balance between the need for emotional support and the desire not to burden their families with their own problems.

The fear factor has a significant correlation with missing the country, dreaming of returning and thinking and caring about the country and its people. Thus, higher levels of fear in the context of migration tend to be experienced by those who miss their country, those who dream of returning to their country of origin and those who care about their country and its people.

In the analysis of their discourses it was observed that maintaining the celebration of festivities and religious practices, as well as being able to maintain habits and customs were identified as important strategies to maintain the connection with the culture of origin. These events provided a sense of belonging and cultural rootedness. Participants mentioned that this gave them comfort and a tangible reminder of their roots. RE30: "Cooking typical dishes from my country is my way of bringing a little piece of home into my daily life. Each taste transports me and makes me imagine being at home with my family, eating together". Other fears related to the possibility of being repatriated or facing situations of danger or discrimination were also reflected in their speeches.

The factor of nostalgia is strongly linked to the desire to return permanently to the country of origin, as participants frequently express missing their homeland, idealizing it as better than their current situation, and feeling distressed by the distance. Statistical analysis shows a significant correlation between nostalgia and the ability to maintain only a few cultural traditions (p < 0.01), as well as the absence of helplessness regarding the cause of exile (p < 0.01). Qualitative findings reinforce this connection, revealing that migration is often driven by a pursuit of rights, opportunities, and safety, but comes at the cost of personal resources—economic, social, or occupational. This trade-off fosters feelings of nostalgia and powerlessness, alongside a deep need to preserve cultural traditions. The primary causes of exile include traumatic experiences, frequently tied to armed conflicts, and poor living conditions in their countries of origin, particularly economic hardship and the absence of fundamental human rights, such as freedom of expression, security, and women's rights. These findings highlight a dual motivation: the search for safety and opportunity in Spain and the emotional toll of leaving behind their cultural identity and personal stability. RE11: "I left there because my uncle wanted to do that to me (gestures referring to female genital mutilation) ...".

Furthermore, having to face numerous losses, such as jobs and even human losses, made participants feel upset about being far away and missing their home country. This led them to experience feelings of sadness, loneliness, and longing, which impacted their emotional well-being during adaptation. RE9: "Leaving behind my family and friends was the hardest part of this journey. Video calls help, but it's not the same as being there, feeling their hugs, and sharing moments together. It's a bit bittersweet".

Lastly, regarding concern, there is a significant negative correlation with immigrating with family and/or friends. Additionally, a notable relationship is observed with distress associated with the migratory process, which is perceived as "somewhat" or "quite" distressing, as well as perceiving things in the home country as much prettier and feeling quite lost.

From a qualitative perspective, it was observed that establishing connections and maintaining support networks in the host country was essential for adaptation. Participants mentioned the importance of having friends, family, and community groups that provided emotional and practical support. Some participants faced challenges of discrimination and prejudice in the host country, which generated feelings of exclusion and difficulties in social integration. Additionally, another concern expressed in their discourse referred to uncertainty about how they would be treated in case of illness.

These feelings do not appear in isolation, but there are multiple interconnected factors. Figure 1 provides a visual representation of the interconnections between the three emotional dimensions (fear, worry and importance) and the associated themes. This figure was developed as a tool to illustrate the emotional complexity experienced by the study participants. The dimensions of fear, worry and helplessness are placed in the centre. This underlines their central role in the emotional experiences of refugees and asylum seekers. Surrounding each dimension, nodes reflect the specific aspects or concrete manifestations of these emotions, as described by participants. For example, in the case of fear, themes such as uncertainty about their future, fear of deportation or concern for family members remaining in the country of origin are included. In the dimension of concern, nodes cover issues such as economic stability, access to health care and the search for housing. Finally, in powerlessness, nodes relate to the feeling of not being able to deal with bureaucratic systems or difficulties in communication. In addition, the figure highlights the connections between the nodes across different dimensions. For example, fear of deportation may be linked to powerlessness, as participants feel they have no control over the legal immigration processes. Likewise, concern for family welfare may intensify fear or generate a sense of powerlessness, creating a cumulative effect on emotional stress.

This relational map aims to provide a holistic view of how these emotional dimensions and their nodes interact, forming a complex but cohesive picture of the emotional burdens faced by participants. The interconnectedness of these emotions reflects that they do not exist in isolation, but are deeply interrelated.

Taken together, these experiences reveal a complex picture of the emotional, physical and behavioural impact that the situation has had on the health and well-being of those interviewed and illustrate the importance of addressing not only the material, but also the emotional and psychological needs of those affected.

rough strength (R) 95% CI p-value (R) 95% CI p-value Profile p-value (R) 95% CI p-value P-value rocess for you in general? 0.09 [-1.74, 0.58] 0.31 -0.10 [-1.93, 0.94] 0.25 -0.03 [-2.89, 0.15] 0.18 rour home country? 0.00 [-1.55, 0.83] 0.84 0.03 [-2.29, 1.38] 0.69 -0.11 [-0.62, 1.82] 0.18 or close friend? 0.00 [-0.28, 0.83] 0.28 -0.01 [-0.57, 0.67] 0.88 -0.19* [0.07, 1.35] 0.18 te friends still live in your home country? 0.07 [-0.28, 0.23] 0.38 -0.01 [-0.57, 0.67] 0.88 -0.05 [-0.257, 0.67] 0.04 [-0.06 [-0.14, 0.01] 0.04 [-0.14, 0.01] 0.07 [-0.89, 1.37] 0.44 to your home country in the future? 0.17 [-1.87, 0.04] 0.09 -0.18 [-0.23, 1.79] 0.01 -0.14 0.14, 0.01 0.09 [-0.14, 0.01] 0.01 -0.14		Fear			Nostalgia			Concern			Identity	y	
0.09 [-1.74, 0.58] 0.31 -0.10 [-1.93, 0.94] 0.25 -0.03 [-2.89, 0.15] 0.75 0.01 [-1.55, 0.83] 0.84 0.03 [-2.29, 1.83] 0.69 -0.11 [-0.62, 1.82] 0.18 0.09 [-0.28, 0.98] 0.28 -0.01 [-0.57, 0.67] 0.88 -0.19* [0.07, 1.35] 0.03 he future? 0.17 [-1.39, 0.23] 0.58 -0.01 [-1.4, 0.01] 0.94 -0.06 [-0.55, 0.95] 0.44 he future? 0.17 [-1.39, 0.23] 0.05 -0.24* [0.28, 1.70] 0.01 [-1.4, 0.01] 0.04 [-1.4, 0.01] 0.07 0.25** [-1.87, 0.04] 0.00 -0.24* [0.28, 1.70] 0.01 [-1.4, 0.01] 0.07 [-1.48, 0.01] 0.09 0.15 [-1.17, 0.04] 0.09 -0.18 [-0.59, 1.99] 0.03 0.04 [-0.89, 0.97] 0.98 0.26** [-2.07, 0.77] 0.01 -0.29** [0.56, 2.62] 0.01 -0.19 [-1.09, 0.95	Questions	(R)	95% CI	p-value	(R)	95% CI	p-value	(R)	95% CI	p-value	(R)	95% CI	p-value
0.01 [-1.55, 0.83] 0.84 0.03 [-2.29, 1.38] 0.69 -0.11 [-0.62, 1.82] 0.18 rhome country?	How distressing was the migration process for you in general?	60.0	[-1.74, 0.58]	0.31	-0.10	[-1.93, 0.94]	0.25	-0.03	[-2.89, 0.15]	0.75	0.02	[-0.72, 1.11]	98.0
rhome country? -0.07 [-0.48, 1.32] 0.38 -0.01 [-0.57, 0.67] 0.88 -0.19* [0.07, 1.35] 0.03 rhome country? -0.07 [0.48, 1.32] 0.38 -0.01 [-1.4, 0.01] 0.94 -0.06 [-0.55, 0.95] 0.44 n the future? 0.17 [-1.39, 0.23] 0.05 -0.24* [0.28, 1.70] 0.01 0.16 [-1.4, 0.01] 0.07 0.25** [-1.87, 0.04] <-0.01 -0.23** [-0.37, 1.13] 0.01 -0.07 [-0.89, 1.37] 0.40 0.15 [-1.17, 0.04] 0.09 -0.18 [-0.59, 1.99] 0.03 0.04 [-0.89, 0.97] 0.98 0.26** [-2.07, 0.77] <-0.01 -0.29** [0.56, 2.62] 0.01 0.09 [-1.05, 1.58] 0.30 0.20* [-1.91, 0.03] 0.02 0.25 [-0.73, 0.96] 0.01 -0.14 [-1.27, 1.44] 0.10 0.04 [-1.88, 0.87] 0.62 -0.21* [-0.98, 0.95] 0.01 [-0.08 [-0.46, 2.56] 0.34 0.10 [-1.75, 0.25] 0.24 -0.14 [-0.40, 1.79] 0.11 -0.08 [-0.46, 2.56] 0.34		0.01	[-1.55, 0.83]	0.84	0.03	[-2.29, 1.38]	69.0	-0.11	[-0.62, 1.82]	0.18	-0.04	[-1.76, 0.33]	0.58
n the future?	Did you migrate with a relative and/or close friend?	-0.09	[-0.28, 0.98]	0.28	- 0.01	[-0.57, 0.67]	0.88	-0.19*	[0.07, 1.35]	0.03	-0.07	[-0.86, 0.48]	0.41
nthe future? 0.17 [-1.39, 0.23] 0.05 -0.24* [0.28, 1.70] 0.01 0.16 [-1.4, 0.01] 0.07 0.25** [-1.87, 0.04] <0.01 -0.23** [-0.37, 1.13] 0.01 -0.07 [-0.89, 1.37] 0.40 0.15 [-1.17, 0.04] 0.09 -0.18 [-0.59, 1.99] 0.03 0.04 [-0.89, 0.97] 0.98 0.10 0.26** [-2.07, 0.77] <0.01 -0.29** [0.56, 2.62] 0.01 0.09 [-1.05, 1.58] 0.30 0.20 0.20* [-1.91, 0.03] 0.02 0.25 [-0.73, 0.96] 0.01 -0.14 [-1.27, 1.44] 0.10 0.20 0.24 [-1.88, 0.87] 0.62 -0.21* [-0.98, 0.95] 0.01 0.00 [-1.27, 0.55] 0.90 0.25 0.10 [-1.75, 0.25] 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25		-0.07	[0.48, 1.32]	0.38	- 0.01	[-1.4, 0.01]	0.94	-0.06	[-0.55, 0.95]	0.44	0.11	[-0.96, 0.40]	0.20
0.25** [-1.87, 0.04] <0.01	n the future?	0.17		0.05	-0.24*	[0.28, 1.70]	0.01	0.16	[-1.4, 0.01]	0.07	-0.04	[-0.55, 0.95]	0.61
0.15 [-1.17, 0.04] 0.09 -0.18 [-0.59, 1.99] 0.03 0.04 [-0.89, 0.97] 0.98 (0.05** [-2.07, 0.77] <0.01 -0.29** [0.56, 2.62] 0.01 0.09 [-1.05, 1.58] 0.30 (0.00 0.20** [-1.01, 0.03] 0.02 0.25 [-0.73, 0.96] 0.01 -0.14 [-1.27, 1.44] 0.10 (0.04 [-1.88, 0.87] 0.62 -0.21* [-0.98, 0.95] 0.01 -0.01 [-1.27, 0.55] 0.90 (0.10 [-1.75, 0.25] 0.24 -0.14 [-0.40, 1.79] 0.11 -0.08 [-0.46, 2.56] 0.34 (0.15** [-0.20**] 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.0	I miss my country	0.25**	[-1.87, 0.04]	< 0.01	-0.23**	[-0.37, 1.13]	10.0	-0.07	[-0.89, 1.37]	0.40	01.0	[-1.56, 0.45]	0.22
0.26** [-2.07, 0.77] <0.01		0.15		60.0	-0.18	[-0.59, 1.99]	0.03	0.04	[-0.89, 0.97]	0.98	0.04	[-1.56, 0.45]	0.58
0.20* [-1.91, 0.03] 0.02 0.25 [-0.73, 0.96] 0.01 -0.14 [-1.27, 1.44] 0.10 0.04 [-1.88, 0.87] 0.62 -0.21* [-0.98, 0.95] 0.01 [-1.27, 0.55] 0.90 0.10 [-1.75, 0.25] 0.24 -0.14 [-0.40, 1.79] 0.11 -0.08 [-0.46, 2.56] 0.34 0.01 [1.17, 0.21] 0.02 0.151 0.22 0.151 0.01 0.161 0.01 0.17	I dream of returning to my country	0.26**	[-2.07, 0.77]	<0.01	-0.29**	[0.56, 2.62]	0.01	60.0	[-1.05, 1.58]	0.30	-0.09	[-1.38, 0.74]	0.31
0.04 [-1.88, 0.87] 0.62 -0.21* [-0.98, 0.95] 0.01 [-1.27, 0.55] 0.90 0.10 [-1.75, 0.25] 0.24 -0.14 [-0.40, 1.79] 0.11 -0.08 [-0.46, 2.56] 0.34 0.11 0.12 0.24 0.14 [-0.40, 1.79] 0.11 0.08 [-0.46, 2.56] 0.34		0.20*	[-1.91, 0.03]	0.02	0.25	[-0.73, 0.96]	0.01	-0.14	[-1.27, 1.44]	0.10	-0.03	[-0.41, 1.90]	0.70
0.10 [-1.75,0.25] 0.24 -0.14 [-0.40,1.79] 0.11 -0.08 [-0.46,2.56] 0.34		0.04		0.62	-0.21*	[-0.98, 0.95]	0.01	-0.01	[-1.27, 0.55]	0.90	-0.00	[-0.81, 1.11]	0.74
001 [151 021 005 005 005 005 005 004		0.10		0.24	-0.14	[-0.40, 1.79]	0.11	-0.08	[-0-46, 2.56]	0.34	60'0	[-1.00, 2.02]	0.30
0.01 [-1.31, 0.21] 0.03 [-0.17] [-2.30, 1.09] 0.03 [-0.70] 1.27] 0.47	I feel powerless because of my exile	0.01	[-1.51, 0.21]	0.85	-0.17	[-2.30, 1.69]	0.05	-0.06	[-0.75, 1.27]	0.47	0.01	[-1.17, 0.92]	0.84

Table 3. Correlations between migration experiences and dimensions of migration grief. *Correlation is significant at the 0.05 level (2-tailed). **Correlation is significant at the 0.01 level (2-tailed).

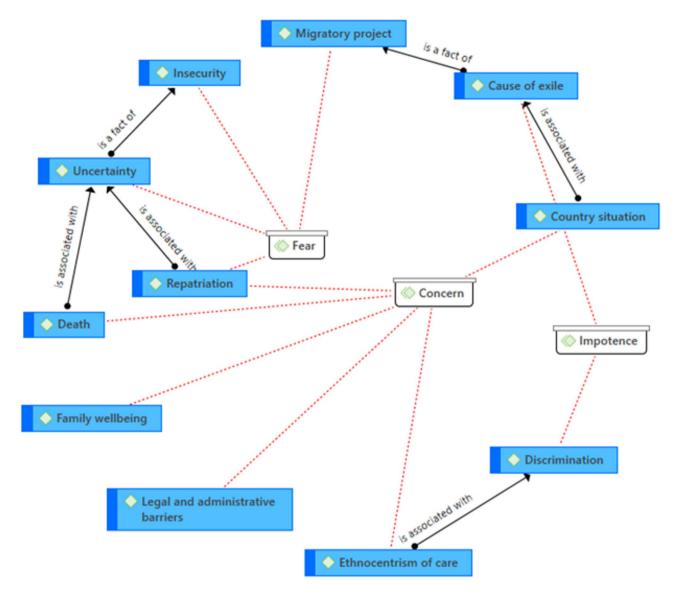


Fig. 1. Relationship map of associations between the dimensions of fear, concern and impotence and their nodes. Source: self-made. Elaborated using the software, Atlas.ti.

Discussion

In the framework of the migratory experience, the results obtained in this study reveal a lesser-known perspective on the emotional complexity of mourning among refugees and asylum seekers. The type of protection sought emerges as a critical component for the mental well-being of migrants. Although fear of identity loss was infrequently reported in a similar study published in Spain²², international protection sought by the population in this study is associated with less identity loss compared to temporary protection²⁷. A study conducted in Australia demonstrated higher levels of stress, anxiety, and depression associated with visa conditions and subsequent adverse living conditions²⁸, emphasizing the importance of stability and mental health security. This underscores the need for migration policies not only addressing immediate legal security but also considering the long-term psychological implications of different protection statuses.

The loss of identity mentioned is also correlated with the male gender, contrary to some previous studies that associate it with the female gender^{29,30}. This finding calls for deeper examination of gender dynamics in the migratory context, suggesting that emotional and psychological experiences may vary considerably between genders, potentially impacting different facets of their health^{31,32}.

These gender dynamics also impact the gender distribution in the country, which is currently balanced. This balanced is largely due to the fact that four of the five top nationalities of individuals seeking international protection come from Latin America. This reflects a more familiar migration pattern³³. However, in 2021, there was a significant increase in the number of men seeking protection, with men making up 64% of the total. This shift was influenced by the presence of three African countries (Morocco, Mali, and Senegal) among the top five countries of origins. This indicates a more masculinized migration pattern³⁴. As a result, nationality highlights distinct differences in the experiences of individuals from Latin America and those from Sub-Saharan Africa.

The former experience grief is marked by concerns related to social stress linked to difficulties in achieving the migration project, alongside the nostalgia this entails³⁵.

This grief is intensified due to similarities between countries (of origin and host), in language and some traditions, but vastly different in cultural aspects, landscape, etc. In contrast, those from Sub-Saharan Africa face a more pronounced fear, possibly related to the characteristics of the migratory journey, often marked by constant threats from mafias and associated means of transportation (such as boats, swimming, jumping over the border fence from Morocco, etc.)^{4,22}. This poses greater difficulty in fitting their memories or aspirations into acceptable forms that meet the criteria for full citizenship in most states³⁶.

Variables such as marital status are associated with identity loss. Being married or divorced may be linked to having a greater family burden. The additional responsibility of family life could contribute to a more intense perception of identity loss, possibly due to the need to balance family expectations and roles with the demands of the new cultural environment.

Similarly, educational level and language proficiency play a crucial role in identity loss. Transitioning from one country to another, especially with secondary education, may result in slow validations and challenges in obtaining qualified jobs. This process often leads to occupying more precarious and physical jobs, affecting the perception of status and personal achievements³⁷. Additionally, intermediate language proficiency is linked to leaving behind one's native language, a fundamental component of cultural identity³⁸. This linguistic challenge adds an additional layer of complexity to the adaptation process, potentially affecting self-image and the sense of cultural belonging and, according to various studies^{39,40}, even depression.

The analysis of emotional factors associated with migration highlighted in this study reveals an emotional triad composed of fear, nostalgia, and concern for the country of origin. Migrants experiencing intense feelings of nostalgia and longing, accompanied by a strong desire to return permanently, tend to experience higher levels of fear. A study published in Italy⁴¹ extends this understanding by explaining how fear can lead to increased activation, anxiety, stress, or even psychiatric disorders and difficult emotional regulation.

Among the findings, guilt feelings and the conspiracy of silence to avoid family suffering are also noteworthy. This sentiment falls under self-conscious emotions, which are related to psychopathology and vulnerable situations such as trauma⁴², as well as grief reactions such as regret, guilt, shame, and high to extreme levels of distress regarding unresolved matters⁴³. Thus, relationships are observed between guilt, distress, fear, anxiety, stress, and even trauma.

This connection suggests that emotions are interconnected, and the intensity of one can amplify others, influencing the overall perception of the migration process^{44,45}. The temporal relationship of residence in the destination country also impacts health⁴⁶. While time can enhance adaptation, reducing initial fears by becoming familiar with cultural norms and social standards, persistent long-term concerns related to economic challenges, legal uncertainties, and discrimination⁴⁷ can deteriorate health⁴⁸. This aspect underscores the need for continuous and adaptive interventions addressing the evolving needs of migrants over time, as time itself does not necessarily resolve all difficulties, and some issues may persist or worsen over time, especially if there are structural barriers in the new country hindering integration or access to opportunities.

The relationship between nostalgia and the desire to permanently return highlights the deep emotional connection some migrants maintain with their country of origin. Those who intensely miss their homeland may experience a greater sense of loss and longing, significantly affecting their psychological well-being and their ability to adapt to the new environment. It is relevant to note that the intensity of nostalgia appears to diminish among those who perceive their country of origin through a more positive or optimistic lens, suggesting that subjective perceptions of the home country play a crucial role in how migrants process their emotional experiences associated with migration⁴⁹.

The role of social support in migration acts as a mitigating factor for concerns and anxieties associated with the migration process. The presence of loved ones during migration seems to act as an emotional buffer, reducing anxiety and worry related to cultural change and adaptation to a new environment.

However, despite the evidenced emotional challenges, it is noteworthy that the majority of participants do not express an immediate desire to permanently return to their home countries in the future, indicating a significant resilience of migrants in the face of emotional difficulties associated with migration^{50,51}.

The integration of quantitative and qualitative methods in this study has enabled a comprehensive examination of migratory grief. Quantitative data provided a robust framework for identifying general trends and associations between variables—such as the impact of protection status, gender, and educational level on the experience of grief—while qualitative data enriched these findings by offering in-depth insights into the lived experiences and underlying emotional processes. For instance, qualitative evidence illuminated how legal conditions and cultural proximity influence one's sense of identity and emotional adaptation. In this way, combining both approaches not only enhances the validity of our findings but also informs the development of more effective support interventions and policies. These insights are crucial for designing strategies that address the comprehensive needs-physical, emotional, and psychological these vulnerable populations, ultimately guiding more effective coping mechanisms and support systems.

Conclusion

This study provides a profound insight into the complexities associated with the migration process, which are part of migratory grief, offering insights into emotional perception, feelings, and underexplored aspects of migration from a mixed quantitative and qualitative perspective. Sociodemographic and migratory variables have a differentiated impact on the dimensions of migratory grief, particularly fear, nostalgia, and identity loss. The emotional connection to the country of origin (such as longing for home or dreaming of returning) emerges as a key factor that intensifies fear and concern. Similarly, social support and legal stability are essential in mitigating the negative emotions associated with the migration process. The implications of these findings are

extensive and point to the need for interventions that address not only the practical aspects of migration but also the emotional and sociodemographic dimensions. Implementing adaptive support programmes, considering social networks in the migration process, and addressing specific variables affecting identity are crucial for fostering healthy and sustainable adaptation in the destination country. Furthermore, there is a need to raise awareness among service providers about the specific needs of migrant populations and to continuously research the living conditions of migrants to identify new emerging needs and assess the effectiveness of implemented interventions. In this regard, this study significantly contributes to the research field, providing valuable insights for designing policies and practices that promote the comprehensive well-being of migrants.

Data availability

Data is provided within the manuscript or supplementary information files.

Code availability

Not applicable.

Received: 13 October 2024; Accepted: 19 May 2025

Published online: 30 September 2025

References

- 1. Conteh, A., Wilkinson, A. & Macarthy, J. Exploring gender, health, and intersectionality in informal settlements in Freetown. Gend. Dev. 29(1), 111–129. https://doi.org/10.1080/13552074.2021.1885215 (2021).
- Lloyd, A. Shaping the contours of fractured landscapes: Extending the layering of an information perspective on refugee resettlement. Inf. Process. Manage. 57(3), 102062. https://doi.org/10.1016/j.ipm.2019.102062 (2020).
- 3. Crawley, H., Jones, K., McMahon, S., Duvell, F. & Sigona, N.: Unpacking a rapidly changing scenario: Migration flows, routes and trajectories across the Mediterranean. (Centre for Trust, Peace and Social Relations, Coventry University, 2016). http://www.medmig.info/wp-content/uploads/2016/03/MEDMIG-Briefing-01-March-2016-FINAL-1.pdf
- Achotegui, J. El síndrome del inmigrante con duelo migratorio extremo: el síndrome de Ulises. Una perspectiva psicoanalítica. Aperturas psicoanalíticas 68, e2 (2021).
- 5. Achotegui, J. Migrants living in very hard situations: Extreme migratory mourning (the Ulysses syndrome). *Psychoanalytic dialogues* 29(3), 252–268. https://doi.org/10.1080/10481885.2019.1614826 (2019).
- Rodríguez, J. C. F., Pineda, N. Z. D. & Muñoz, F. M. El Síndrome de Ulises: el estrés límite del inmigrante. RESI Revista de estudios en seguridad internacional 6(1), 101–117. https://doi.org/10.18847/1.11.7 (2020).
- 7. Leiler, A., Hollifield, M., Wasteson, E. & Bjärtå, A. Suicidal ideation and severity of distress among refugees residing in asylum accommodations in Sweden. *Int. J. Environ. Res. Public Health* 16(15), 2751. https://doi.org/10.3390/ijerph16152751 (2019).
- 8. Schlaudt, V. A. et al. Traumatic experiences and mental health risk for refugees. Int. J. Environ. Res. Public Health 17, 1943. https://doi.org/10.3390/ijerph17061943 (2020).
- 9. Byrow, Y., Pajak, R., McMahon, T., Rajouria, A. & Nickerson, A. Barriers to mental health help-seeking amongst refugee men. *Int. J. Environ. Res. Public Health* 16, 2634. https://doi.org/10.3390/ijerph16152634 (2019).
- 10. Fuentes, M. N. Salud y duelo en el proceso migratorio. Educ. J. Health Environ. Citizensh. https://doi.org/10.12795/esamec.2020.i0 1.06 (2020).
- 11. Najjarkakhaki, A. & Ghane, S. The role of migration processes and cultural factors in the classification of personality disorders. Transcult. Psychiatry 60(1), 99–113. https://doi.org/10.1177/13634615211036408 (2023).
- 12. Bhugra, D. & Becker, M. A. Migration, cultural bereavement and cultural identity. World Psychiatry Off. J. World Psychiatric Assoc. 4(1), 18–24 (2005).
- 13. CEAR. Informe 2020: Las Personas Refugiadas en España y Europa. 2020. Available online: https://www.cear.es/informe-cear-2020/ (Accessed on 26 November 2024).
- Djelantik, A. M. J. et al. Post-migration stressors and their association with symptom reduction and non-completion during treatment for traumatic grief in refugees. Front. Psych. 11, 407. https://doi.org/10.3389/fpsyt.2020.00407 (2020).
- 15. González Calvo, V. El duelo migratorio. Trabajo Social (Universidad Nacional de Colombia) 7, 77-97 (2005).
- León-Pinilla, R., Soto-Rubio, A. & Prado-Gascó, V. Support and emotional well-being of asylum seekers and refugees in Spain. Int. J. Environ. Res. Public Health 17(22), 8365. https://doi.org/10.3390/ijerph17228365 (2020).
- 17. Tong, A., Sainsbury, P. & Craig, J. Consolidated criteria for reporting qualitative research (COREQ): A 32-item checklist for interviews and focus groups. *Int. J. Qual. Health Care* 19(6), 349–357. https://doi.org/10.1093/intqhc/mzm042 (2007).
- 18. Naderifar, M., Goli, H. & Ghaljaie, F. Snowball sampling: A purposeful method of sampling in qualitative research. Strides Dev. Med. Educ. https://doi.org/10.5812/sdme.67670 (2017).
- 19. Mwita, K. Factors influencing data saturation in qualitative studies. *Int. J. Res. Bus. Soc. Sci.* 11(4), 414–420. https://doi.org/10.205 25/ijrbs.v11i4.1776 (2022).
- 20. Ferrero, M. V. Barriers to asylum? Notes on the system of international protection in Spain. Available online: https://www.cidob.org/en/publications/barriers-asylum-notes-system-international-protection-spain (Accessed on 28 November 2024).
- 21. Achotegui, J.: Los duelos de la migración: una perspectiva psicopatológica y psicosocial. Med. Cult., 88-100 (2000).
- 22. De la Revilla, L. et al. Estudio del duelo migratorio en pacientes inmigrantes que acuden a las consultas de atención primaria. Presentación de un cuestionario de valoración del duelo migratorio. *Atención primaria* 43(9), 467–473. https://doi.org/10.1016/j.aprim.2010.09.013 (2011).
- 23. Casado, B. L., Hong, M. & Harrington, D. Measuring migratory grief and loss associated with the experience of immigration. *Res. Soc. Work. Pract.* 20(6), 611–620. https://doi.org/10.1177/1049731509360840 (2010).
- 24. Taylor, S. J., Bogdan, R. & DeVault, M. L. Introduction to Qualitative Research Methods: A Guidebook and Resource (Wiley, 2015).
- 25. Lambert, S. D. & Loiselle, C. G. Combining individual interviews and focus groups to enhance data richness. J. Adv. Nurs. 62(2), 228–237. https://doi.org/10.1111/j.1365-2648.2007.04559.x (2008).
- 26. Permuth-Wey, J. & Borenstein, A. R. Financial remuneration for clinical and behavioral research participation: Ethical and practical considerations. *Ann. Epidemiol.* **19**(4), 280–285. https://doi.org/10.1016/j.annepidem.2009.01.004 (2009).
- Strang, A. B. & Quinn, N. Integration or isolation? Refugees' social connections and wellbeing. J. Refug. Stud. 34(1), 328–353. https://doi.org/10.1093/jrs/fez040 (2021).
- 28. Momartin, S. et al. A comparison of the mental health of refugees with temporary versus permanent protection visas. *Med. J. Aust.* **185**(7), 357–361. https://doi.org/10.5694/j.1326-5377.2006.tb00610.x (2006).
- Moreno, G. P., Engel, J. L. & Polo, S. A. Diagnóstico de depresión en inmigrantes subsaharianos. Atención primaria 39(11), 609–614. https://doi.org/10.1157/13112198 (2007).

- 30. Jarallah, Y. & Baxter, J. Gender disparities and psychological distress among humanitarian migrants in Australia: A moderating role of migration pathway?. *Confl. Heal.* 13, 1–11. https://doi.org/10.1186/s13031-019-0196-y (2019).
- 31. Choy, B., Arunachalam, K., Gupta, S., Taylor, M. & Lee, A. Systematic review: Acculturation strategies and their impact on the mental health of migrant populations. *Public Health Pract.* 2, 100069. https://doi.org/10.1016/j.puhip.2020.100069 (2021).
- 32. Nesterko, Y., Jäckle, D., Friedrich, M., Holzapfel, L. & Glaesmer, H. Factors predicting symptoms of somatization, depression, anxiety, post-traumatic stress disorder, self-rated mental and physical health among recently arrived refugees in Germany. *Confl. Heal.* 14, 1–12. https://doi.org/10.1186/s13031-020-00291-z (2020).
- 33. Accem. Informe Personas Refugiadas en España y en la Unión Europea (2023). https://www.accem.es/refugiados/informe-person as-refugiadas-datos-2022/
- 34. Zubrzycki, B. & Alvarado, L. F. S. Redes y proyectos migratorios de los senegaleses en Argentina. Cadernos Ceru 26(1), 69–84. htt ps://doi.org/10.11606/issn.2595-2536.v26i1p69-84 (2015).
- Kananian, S., Starck, A. & Stangier, U. Cultural adaptation of CBT for Afghan refugees in Europe: A retrospective evaluation. Clin. Psychol. Eur. https://doi.org/10.32872/cpe.5271 (2021).
- 36. Appadurai, A. Traumatic exit, identity narratives, and the ethics of hospitality. *Telev New Media* 20(6), 558–565. https://doi.org/10.1177/1527476419857678 (2019).
- 37. Hasan, S. I. et al. Prevalence of common mental health issues among migrant workers: A systematic review and meta-analysis. *PLoS ONE* **16**(12), e0260221, https://doi.org/10.1371/journal.pone.0260221 (2021).
- 38. Feinberg, I., O'Connor, M. H., Owen-Smith, A., Ogrodnick, M. M. & Rothenberg, R. The relationship between refugee health status and language, literacy, and time spent in the United States. *HLRP Health Lit. Res. Pract.* 4(4), e230–e236. https://doi.org/10.1371/journal.pone.0260221 (2020).
- 39. Gleeson, C. et al. Post-migration factors and mental health outcomes in asylum-seeking and refugee populations: A systematic review. Eur. J. Psychotraumatol. https://doi.org/10.1080/20008198.2020.1793567 (2020).
- Watkins, P. G., Razee, H. & Richters, J. 'I'm telling you... the language barrier is the most, the biggest challenge': Barriers to education among Karen refugee women in Australia. Aust. J. Educ. 56(2), 126–141. https://doi.org/10.1177/000494411205600203 (2012).
- 41. Battaglia, S., Nazzi, C. & Thayer, J. F. Heart's tale of trauma: Fear-conditioned heart rate changes in post-traumatic stress disorder. *Acta Psychiatr. Scand.* https://doi.org/10.1111/acps.13602 (2023).
- 42. Vallejo-Martin, M., Sanchez Sancha, A. & Canto, J. M. Refugee women with a history of trauma: Gender vulnerability in relation to post-traumatic stress disorder. *Int. J. Environ. Res. Public Health* 18(9), 4806. https://doi.org/10.3390/ijerph18094806 (2021).
- 43. Lee, S. A., Neimeyer, R. A., Mancin, V. O. & Breen, L. J. Unfinished business and self-blaming emotions among those bereaved by a COVID-19 death. *Death Stud.* 46(6), 1297–1306. https://doi.org/10.1080/07481187.2022.2067640 (2022).
- 44. Villacieros, I. El impacto del estrés por aculturación sobre la sintomatología de los adolescentes migrantes en arica y antofagasta, chile [Acculturative stress impact and symptomatology on migrant's adolescents at Arica and Antofagasta, Chile]. Revista Española De Educación Comparada 35, 141–154. https://doi.org/10.5944/reec.35.2020.25107 (2020).
- 45. Garciandía Imaz, J. A. & Garciandía Rozo, I. Semiología de la Migración. Revista Colombiana de Psiquiatría 52(3), 251-264 (2023).
- 46. Lebano, A. et al. Migrants' and refugees' health status and healthcare in Europe: a scoping literature review. *BMC Public Health* https://doi.org/10.1186/s12889-020-08749-8 (2020).
- Costello, C. & Foster, M. (Some) refugees welcome: When is differentiating between refugees unlawful discrimination?. Int. J. Discrim. Law 22(3), 244–280. https://doi.org/10.1177/13582291221116476 (2022).
- 48. Berchet, C., Jusot, F.: État de santé et recours aux soins des immigrés en France: une revue de la littérature. HAL Post-Print, (hal-01593735) (2012).
- 49. Frank-Job, B. La migración como Proceso: el concepto de temporalidad en blogs de migrantes latinoamericanos a Quebec Vol. 108 (Kipu-Verlag, 2020). https://doi.org/10.4119/unibi/2943279.
- 50. Bilecen, B. & Vacca, R. The isolation paradox: A comparative study of social support and health across migrant generations in the US. Soc. Sci. Med. 283, 114204. https://doi.org/10.1016/j.socscimed.2021.114204 (2021).
- 51. Li, F. et al. Effects of sources of social support and resilience on the mental health of different age groups during the COVID-19 pandemic. *BMC Psychiatry* https://doi.org/10.1186/s12888-020-03012-1 (2021).

Acknowledgements

We gratefully acknowledge the collaboration of the non-governmental organization "Cruz Roja Huelva" as well as the cultural intermediators, refugees, and asylum seekers who participated in the study.

Author contributions

MJCT: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Visualization, Writing—original draft. AFA: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Project administration, Resources, Supervision, Validation, Visualization, Writing—review and editing. EBGN: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Project administration, Resources, Supervision, Writing—original draft.

Funding

No funding.

Declarations

Competing interests

The authors declare no competing interests.

Ethics approval and consent to participate

The study followed the international ethical recommendations set out in the Declaration of Helsinki. Participation in the study was completely free of charge and voluntary. Responses to all questionnaires were anonymous and all personal information provided was stored in a way that complied with the legal requirements for the protection of personal data and guarantee of digital rights (Organic Law 15/1999 of 13 December and Organic Law 3/2018 of 5 December 2018). The project was approved by the Ethics Committee of the Junta de Andalucía (reference number: 0426-N/2023 PEIBA).

Consent for publication

Not applicable.

Additional information

Supplementary Information The online version contains supplementary material available at https://doi.org/1 0.1038/s41598-025-03224-z.

Correspondence and requests for materials should be addressed to M.J.C.-T.

Reprints and permissions information is available at www.nature.com/reprints.

Publisher's note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Open Access This article is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License, which permits any non-commercial use, sharing, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if you modified the licensed material. You do not have permission under this licence to share adapted material derived from this article or parts of it. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit https://creativecommons.org/licenses/by-nc-nd/4.0/.

© The Author(s) 2025