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Cross-cultural adaptation and validation of the *Social Needs: Patient Questionnaire* to European spoken Portuguese

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ABSTRACT

Objectives: To cross-culturally adapt and validate the *Social Needs: Patient Questionnaire* (SN-PQ) for European Portuguese for individuals 18 to 65 years old.

Methods: Observational study, the questionnaire underwent cross-cultural adaptation following translation debriefing and back--translation to English, and its internal consistency, doubts, and criticism. The validation stage used a Google Forms version of the questionnaire distributed via social networks, with its score being calculated, and gender, the Socioeconomic Deprivation Index, and suffering from multimorbidity were used as context variables. The SN-PQ score was calculated as the sum of the eleven needs, higher score meaning more needs.

Results: The correlation between SEDI and SN-PQ was moderately negative and significant, ρ=-0.415, p<0.001. Women more frequently showed concern about food and medical care expenses, p=0.027 and p=0.007, respectively. People with higher socio-economic stratum showed significantly less housing problems, p=0.001, more confidence in completing documents alone, p=0.010, and dealing with health and problems, p=0.010. For n=61 (48.8%) of this sample, there was at least one social need, transport to and from medical appointments being the most frequent one. No differences were found by gender, p=0.069, age group, p=0.122, or having multimorbidity, p=0.291.

Discussion: This is the first Portuguese study to address these social needs of health. It is worth stressing the pertinence of further research for a deeper understanding of the relationship between a person's social needs and health consequences.

Conclusion: In this online sample, 48.8% reported at least one social need that should be addressed in Primary Care for better results and health consequences. A better socio-economic class meant fewer social needs.

Palavras-chave: Social needs; Patient; Health; Socioeconomy.

INTRODUCTION

Patients' well-being cannot be addressed without knowing their context.[1] Twenty percent of health-related problems are solved with medical care, medicines, or other medical manoeuvres, leaving the remaining eighty percent to the social context of each patient.[1] If social needs are not addressed, healthcare providers will struggle to improve outcomes.[2] Therefore, we meet the urge to study the impact of these social factors on patients.

Non-medical factors that impact health outcomes are known as social determinants of health (SDH), as stated by the World Health Organization.[1] SDH encompasses various conditions that affect people from birth to old age, including the place(s) where they live, their work, and how they grow. Additionally, SDHs are influenced by wider forces and systems such as economic policies, social norms, development agendas, political systems, and social policies.[3]

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The social factors that affect health are the root cause of many of today's major health problems, including obesity, heart disease, diabetes, arterial hypertension, and depression.[4] SDHs are interconnected. Poor health or lack of education can reduce employment opportunities, limiting income. Low income reduces access to healthcare and healthy food, leading to hardship. Hardship causes stress, which can lead to unhealthy coping mechanisms such as substance abuse or overeating unhealthy foods, and excess neuro-endocrine release of stress hormones, and hence arterial hypertension, leading to cardiovascular outcomes.[4]

The cultural adaptation of the existing social health needs screening developed by the American Academy of Family Physicians, *Social Needs: Patient Questionnaire,* was deemed important for the European Portuguese context. The survey focuses on lack of transportation, social isolation, food insecurity, financial strain, housing problems, and household violence.[5] According to nationwide studies, in 2023, 4,9% of the Portuguese population was considered to be in economic and social deprivation, such as a lack of money to pay bills, heat the house, or hang out with family or friends.[6] In 2022, the poverty risk rate was 17%, taking into account pensions and other social transfers received.[6] Some of the determinants are yet to be studied and linked to multimorbidity in Portugal.[6-7] The COVID-19 pandemic, followed by the war in Ukraine, and increasing interest rates have made it very difficult to pay monthly bills.

Multimorbidity is commonly defined as the co-occurrence of at least two chronic conditions in the same individual, although its actual definition is much more complex.[7-8] Approximately 72,7% of Portugal's population experiences two or more chronic illnesses, according to a previous nationwide study.[9] These numbers rise to 80% when patients are older than 65 years old.[10]

Certain vulnerable groups, such as the elderly, less educated, and pensioners/retirees, were found to have the highest levels of multimorbidity, which highlights the need for consideration of these groups in public policies related to health promotion and disease prevention.[9] To improve the quality of life of multimorbid patients, within primary care practices and health delivery systems, one should take into special account some factors. These being: their gender, the perceived family support, and the self-perceived economic status, because of their relationship with both physical and mental health.[11]

It is possible that in clinical practice, such an empiric assessment is carried out by the family doctor, but in a somewhat unstructured manner. Multidisciplinary involvement is an added value in primary healthcare with a structured instrument, well-adapted to the Portuguese population, accessible in the Portuguese National Health Service e-records programme, the SClinico.

By examining factors such as educational level, family living, and monthly income, a socioeconomic status can be determined, the Socio-economic Deprivation Index (SEDI).[12] Still, access to healthcare and quality of living are key determinants that significantly impact health outcomes, far beyond the objective examination in a medical appointment.[1-3]

This knowledge allows professionals to personalize interventions, address social barriers, and promote health equity while making it more patient-centred with improved communication, resulting in better health outcomes.[13-16]

The present study aimed to cross-culturally adapt and then validate the *Social Needs: Patient Questionnaire* to European-spoken Portuguese, as such an evaluation instrument did not exist in this context for those under 65 years of age.

METHODS

Cross-cultural adaptation was made by translation, debriefing, and back-translation, according to best practice, following the specifications provided by RAND Health Care.[17]

The ethics committee of the Administração Regional de Saúde do Centro had already issued a positive consent about a similar task for individuals older than 65 years, one of the authors being senior in both tasks. The translation was performed by two Portuguese natives, English fluents, and not aware of the original questionnaire. Then a set of four, two PhD doctors, one PhD nurse, and one lay person found the best matching Portuguese wording for the English questionnaire. The shortest number of words per sentence and of syllables per word was sought for, as a preference factor. Then it was back translated by a native English but Portuguese-fluent translator, to check for differences in wording. As SNPQ is free to use from the doctor's perspective of

work, no authorization from the American Academy of Family Physicians was required.

For quality of cross-cultural adaptation and to evaluate the internal consistency of the questionnaire, an initial 19-persons study was conducted. These inquiries took place at USF Coimbra Sul on the 18th of October and the 8th of November 2023. The participants were conveniently selected in the facilities' waiting room, sampled on random days for intervention. Inclusion criteria were to be over and under 18 and 65 years of age, to be able to understand and answer a questionnaire, to accept answering, and to sign an informed consent form.

This sample's task consisted of nine persons under 45 years of age (five women and two men) and 10 between 45 and 65 years of age (six women and two men). The author timed the filing-in, after which criticism and suggestions were asked for.

The validation stage answers were obtained via a Google Forms version of the questionnaire; the online link was shared in the authors' conversational social networks. The Forms was available online from December 8th, 2023, to January 6th, 2024. It was assumed that, despite being to some extent advanced in age, this group of people was not info-excluded.

Context variables, the Socio-Economic Deprivation Index (SEDI) model, gender, and number of diseases were gathered. The SEDI of the sample population was calculated by attributing a score based on: the living status (alone – 1 point; accompanied – 2 points); educational level (illiterate – 1; primary school – 1; middle school - 1; high school – 2; college education – 2); and monthly income (less than minimum wage – 1; minimum wage or higher – 2), being that the total score ranged from 3 to 6, higher values revealing better socio-economic status.

A *Social Needs: Patient Questionnaire* score was calculated, attributing value 1 to the worst response of the 11 domains studied, the worst score being 11.

The minimum sample size was calculated as 10 answers for each question, as n=110.

SPSS 27th version was used for descriptive and inferential statistics, χ^2, and Mann-Whitney U.

Consent was obtained by the Ethical Commission of the Administração Regional de Saúde do Centro, as well as the author of the original questionnaire.

RESULTS

In the cross-cultural adaptation phase, the test-retest questionnaire responses showed no significant difference, p>0.05.

The mean questionnaire time-length response was 2'46' [50' to 3'58']. There were no critiques of the questionnaire and for the asked inputs, one participant suggested an intermediate option between 'Yes' and 'No' answers in some questions, which was not in accordance with the original questionnaire.

According to Table 1, in the validation study, the questionnaire was submitted by a total of n=123 respondents, 62 (50.4%) men, of whom 23 (37.1%) were younger than 45 years. Of the 61 (49.6%) women surveyed, 36 (59.0%) were younger than 45 years. Women were significantly younger than men, p=0.012. As for SEDI, there was no significant difference between genders, with women scoring higher.

According to age, Table 2 reveals only a significant difference for the number of chronic illnesses, with older individuals with more diseases. of the participants. However, the answer "two or more" was more frequent among the older ones.

No significant difference was found for SEDI according to not suffering or suffering of multimorbidity: 5.7±0.6 and 5.0±0.9, p=0.079, respectively.

Table 3 shows the gender distribution of the answers to the questionnaire items. There were only significant differences for two items: "In the last 12 months, did you ever worry that your food would run out before you had money to buy more?", women more often answering yes, p=0.027, and "In the last 12 months, did your food ever not last and you didn't have money to get more? – Medical Care", women were also more answering yes, p=0.007.

Table 4 shows the distribution of responses to the questionnaire according to age group. The only significant difference found was in the question "Do you have any problems with your housing, such as unsafe/unclean conditions, temporary living, or no place to be?" on "Temporary living", the younger group of participants answered positively, p=0.036.

As for the answers to the SEDI, there was no significant difference by gender (male 5.6±0.1 *vs* female 5.7±0.1, p=0.342).

The correlation between SEDI and the questionnaire score was a positive, weak, and non-significant one, ρ=0.079, p=0530.

TABLE 1. Context variables according to gender

		Gender		Total	*p*
		Male n (%)	Female n (%)		
Do you live alone? "Vive só?" **(*)**	Yes	11 (17.7)	6 (9.8)	17 (13.8)	0.157
	No	51 (82.3)	55 (90.2)	106 (86.2)	
Do you have a 6th grade degree? ("Tem a 6.ª classe?" **(*)**	No	7 (11.3)	10 (16.4)	17(13.8)	0.289
	Yes	55 (88,7)	51 (83.6)	106 (86.3)	
Is your income lower than the national minimum wage? "O seu rendimento é menor que o Salário Mínimo Nacional?" **(*)**	Yes	10 (16.1)	5 (8.2)	15 (12.2)	0.143
	No	52 (83.9)	56 (91.8)	108 (87.8)	
How many chronic illnesses do you suffer from? "De quantas doenças crónicas sofre" (*)	Less than two	22 (75.9)	19 (95.0)	41 (83.7)	0.079
	Two or more	7 (24.1)	1 (5.0)	8(16.3)	
Age group (*)	Up to 45 years old	23 (37.1)	36 (59.0)	59 (48.9)	0.012
	[46 to 64] years old	39 (62.9)	25 (41.0)	64 (52.0)	
SEDI (**)		5.5±0.6	5.7±0.6	5.6±0.6	0.342

Legend: NMW = National Minimum Wage; (*) Mann-Whitney U; (**) Student-t test; SEDI = Socio-Economic Deprivation Index.

TABLE 2. Variables according to age

Question English "Portuguese"		Age		Total	*p*
		Up to 45 years old *n* (%)	[46 to 64] years old *n* (%)		
Do you live alone? "Vive só?" **(*)**	Alone	8 (13.6)	9 (14.1)	17 (13.8)	0.572
	Accompanied	51 (86.4)	55 (85.9)	106 (86.2)	
Do you have a 6th grade degree? ("Tem a 6.ª classe?" (*)	Until 6th grade	7 (11.9)	10 (15.6)	17 (13.8)	0.367
	6th grade or higher	52 (88.1)	54 (84.4)	106 (6.2)	
Is your income lower than the national minimum wage? "O seu rendimento é menor que o Salário Mínimo Nacional?" **(*)**	Lower than NMW	9 (15.3)	6 (9.4)	15 (12.2)	0.236
	NMW or higher	50 (84.7)	58 (90.6)	108 (87.8)	
How many chronic illnesses do you suffer from? "De quantas doenças crónicas sofre" **(*)**	Less than two	16 (100)	25 (75.8)	41 (83.7)	0.031
	Two or more	0 (0.0)	8 (24.2)	8 (16.3)	
SEDI (**)		5.6±0.6	5.6±0.6	5.6±0.6	0.887

Legend: NMW = National Minimum Wage; (*) Mann-Whitney U; (**) Student-t test; SEDI = Socio-Economic Deprivation Index.

The responses to the questionnaire by SEDI's score median, ≤5 and >5, Table 5 reveal, for housing issues, that those who answered positively were more likely to have a lower socioeconomic status, p=0.001. As for their

TABLE 3. Questionnaire's answers according to gender

Question English "Portuguese"		Gender		Total	*p*
		Male *n* (%)	Female *n* (%)		
Is it difficult to get transportation to or from your medical appointments? "É difícil conseguir transporte para ir ou voltar das suas consultas médicas?"	Yes	14 (22.6)	11 (18.0)	25 (20.3)	0.344
	No	48 (77.4)	50 (82.0)	98 (79.7)	
Is there someone you can rely on when you have a problem? Is there someone you can rely on when you have a problem? "Há alguém em quem possa confiar quando tem problemas?"	Yes	62 (100)	60 (98.4)	122 (99.2)	0.496
	No	0 (0.0)	1 (1.6)	1 (0.8)	
Are there enough people you feel close to? "Julga ter um número suficiente de pessoas de quem se sinta próxima(o)?"	Yes	60 (96.8)	56 (91.8)	116 (94.3)	0.213
	No	2 (3.2)	5 (8.2)	7 (5.7)	
In the last 12 months, did you ever worry that your food would run out before you had money to buy more? "Nos últimos 12 meses, alguma vez ficou sem comida e não tinha dinheiro para comprar mais?"	Yes	4 (6.5)	12 (19.7)	16 (13.0)	0.027
	No	58 (93.5)	49 (80.3)	107 (87.0)	
What is it that you have trouble paying for? "Nos últimos 12 meses, alguma vez se sentiu preocupada(o) por ter de pagar as suas despesas?"	Yes	2 (3.2)	2 (3.3)	4 (3.3)	0.684
	No	60 (96.8)	59 (96.7)	119 (96.7)	
What is it that you have trouble paying for?					
Food "Comida"	Yes	27 (43.5)	32 (52.5)	59 (48.0)	0.209
	No	35 (56.5)	29 (47.5)	64 (52.0)	
Rent/mortgage "Renda/Empréstimo"	Yes	3 (4.8)	4 (6.6)	7 (5.7)	0.491
	No	59 (95.2)	57 (93.4)	116 (94.3)	
Medical Care "Cuidados Médicos"	Yes	11 (17.7)	24 (39.3)	35 (28.5)	0.007
	No	51 (82.3)	37 (60.7)	88 (71.5)	
Prescriptions "Medicamentos"	Yes	9 (14.5)	13 (21.3)	22 (17.9)	0.227
	No	53 (85.5)	48 (78.7)	101 (82.1)	
Insurance "Seguros"	Yes	4 (6.6)	9 (14.8)	13 (10.7)	0.120
	No	57 (93.4)	52 (85.2)	109 (89.3)	
Gas/Electricity "Gás/Eletricidade"	Yes	9 (15.0)	17 (27.9)	26 (21.5)	0.066
	No	51 (85.0)	44 (72.1)	95 (78.5)	
Childcare "Cuidados com crianças"	Yes	5 (8.5)	10 (16.4)	15 (12.2)	0.128
	No	57 (91.9)	51 (83.6)	108 (87.8)	

(continues)

TABLE 3. Questionnaire's answers according to gender *(continued)*

Question English "Portuguese"		Gender		Total	*p*
		Male *n* (%)	Female *n* (%)		
Do you have any problems with your housing, such as unsafe/unclean conditions, temporary living, or no place to live? "Tem alguns problemas com a sua habitação, como condições de insegurança/falta de limpeza, estar em habitação temporária ou não ter onde viver?"	Yes	6 (9.7)	4 (6.6)	10 (8.1)	0.382
	No	56 (90.3)	57 (93.4)	113 (91.9)	
Unsafe conditions "Insegurança"	Yes	2 (3.2)	7 (11.5)	9 (7.3)	0.078
	No	60 (96.8)	54 (88.5)	114 (92.7)	
Unclean conditions "Falta de limpeza"	Yes	4 (6.5)	4 (6.6)	8 (6.5)	0.632
	No	58 (93.5)	57 (93.4)	115 (93.5)	
Temporary housing "Habitação temporária"	Yes	3 (4.8)	7 (11.5)	10 (8.1)	0.155
	No	59 (95.2)	54 (88.5)	113 (91.9)	
No place to live or living on street "Sem alojamento ou viver na rua"	Yes	1 (1.6)	1 (1.6)	2 (1.6)	0.748
	No	61 (98.4)	60 (98.4)	121 (98.4)	
Does a partner, or anyone at home, hurt, hit, or threaten you? "Quem vive consigo, ou alguém em casa, magoa-a(o) bate-lhe ou ameaça-a(o)?"	Yes	0 (0)	3 (4.9)	3 (2.4)	0.119
	No	62 (100)	58 (95.1)	120 (97.6)	
How confident are you filling out forms by yourself? "Qual é o seu grau de confiança para preencher documentos sozinha(o)?"	Not at all	6 (9.7)	5 (8.2)	11 (8.9)	0.396
	Somewhat	3 (4.8)	8 (13.1)	11 (8.9)	
	Extremely	53 (85.5)	48 (78.7)	101 (82.1)	
How confident are you that you can control and manage most of your health problems? "Qual é a sua confiança em conseguir controlar e orientar a maior parte dos seus problemas de saúde?"	2	1 (1.6)	0 (0.0)	1 (0.8)	0.117
	4	1 (1.6)	3 (4.9)	4 (3.3.)	
	5	1 (1.6)	2 (3.3)	3 (2.4)	
	6	4 (6.5)	1 (1.6)	5 (4.1)	
	7	4 (6.5)	2 (3.3)	6 (4.9)	
	8	24 (38.7)	18 (29.5)	42 (34.1)	
	9	11 (17.7)	11 (18.0)	22 (17.9)	
	10	16 (25.8)	24 (39.3)	40 (32.5)	

confidence in completing documents alone and confidence in managing health problems those who responded better were in a higher socio-economic stratum, p=0.006 and p=0.010, respectively. For n=87 (69.9%) of respondents, there was at least one problem, and the most common needs were concern about expenses (49.6%), namely rent/mortgage and insurance, and transport to and from medical appointments (20.3%), according to Table 5.

The score of the *Social Needs: Patient Questionnaire* correlated negatively moderately and significantly with SEDI score, ρ=-0.415, p<0.001, meaning that as SEDI

TABLE 4. Questionnaire's answers according to age

Question English "Portuguese"		Age group		Total	*p*
		Up to 45 years old *n* (%)	[46 to 64] years old *n* (%)		
Is it difficult to get transportation to or from your medical appointments? "É difícil conseguir transporte para ir ou voltar das suas consultas médicas?"	Yes	11 (18.6)	14 (21.9)	25 (20.3)	0.414
	No	48 (81.4)	50 (78.1)	98 (79.7)	
Is there someone you can rely on when you have a problem? "Há alguém em quem possa confiar quando tem problemas?"	Yes	58 (98.3)	64 (100)	122 (99.2)	0.480
	No	1 (1.7)	0 (0.0)	1 (0.8)	
Are there enough people you feel close to? "Julga ter um número suficiente de pessoas de quem se sinta próxima(o)?"	Yes	54 (91.5)	62 (96.9)	116 (94.3)	0.188
	No	5 (8.5)	2 (3.1)	7 (5.7)	
In the last 12 months, did you ever worry that your food would run out before you had money to buy more? "Nos últimos 12 meses, alguma vez ficou sem comida e não tinha dinheiro para comprar mais?"	Yes	9 (15.3)	7 (10.9)	16 (13.0)	0.329
	No	50 (84.7)	57 (89.1)	107 (87.0)	
In the last 12 months, did your food ever not last and you didn't have money to get more? "Nos últimos 12 meses, alguma vez se preocupou com o facto de a sua comida poder esgotar-se antes de ter dinheiro para comprar mais?"	Yes	4 (6.8)	0 (0.0)	4 (3.3)	0.050
	No	55 (93.2)	64 (100)	119 (96.7)	
What is it that you have trouble paying for? "Nos últimos 12 meses, alguma vez se sentiu preocupada(o) por ter de pagar as suas despesas?"					
Food "Comida"	Yes	30 (50.8)	29 (45.3)	59 (48.0)	0.332
	No	29 (49.2)	35 (54.7)	64 (52.0)	
Rent/mortgage "Renda/Empréstimo"	Yes	5 (8.5)	2 (3.1)	7 (5.7)	0.188
	No	54 (91.5)	62 (96.9)	116 (94.3)	
Medical care "Cuidados méidicos"	Yes	21 (35.6)	14 (21.9)	35 (28.5)	0.069
	No	38 (64.4)	50 (78.1)	88 (71.5)	
Prescriptions "Medicamentos"	Yes	14 (23.7)	8 (12.5)	22 (17.9)	0.082
	No	45 (76.3)	56 (87.5)	101 (82.1)	
Insurance "Seguros"	Yes	7 (12.1)	6 (9.4)	13 (10.7)	0.424
	No	51 (87.9)	58 (90.6)	109 (89.3)	
Gas/Electricity "Gás/Eletricidade"	Yes	14 (24.1)	12 (19.0)	26 (21.5)	0.323
	No	44 (75.9)	51 (81.0)	95 (78.5)	
Childcare "Cuidados com crianças"	Yes	8 (13.6)	7 (10.9)	15 (12.2)	0.432
	No	51 (86.4)	57 (89.1)	108 (87.8)	

(continues)

TABLE 4. Questionnaire's answers according to age *(continued)*

Question English "Portuguese"		Age group		Total	*p*
		Up to 45 years old *n* (%)	[46 to 64] years old *n* (%)		
Do you have any problems with your housing, such as unsafe/unclean conditions, temporary living, or no place to live? "Tem alguns problemas com a sua habitação, como condições de insegurança/falta de limpeza, estar em habitação temporária ou não ter onde viver?"	Yes	6 (10.2)	4 (6.3)	10 (8.1)	0.321
	No	53 (89.8)	60 (93.8)	113 (91.9)	
Unsafe conditions "Insegurança"	Yes	3 (5.1)	6 (9.4)	9 (7.3)	0.288
	No	56 (94.9)	58 (90.6)	114 (92.7)	
Unclean conditions "Falta de limpeza"	Yes	2 (3.4)	6 (9.4)	8 (6.5)	0.164
	No	57 (96.6)	58 (90.6)	115 (93.5)	
Temporary housing "Habitação temporária"	Yes	8 (13.6)	2 (3.1)	10 (8.1)	0.036
	No	51 (86.4)	62 (96.9)	113 (91.9)	
No place to live or living on street "Sem alojamento ou vivendo na rua"	Yes	1 (1.7)	1 (1.6)	2 (1.6)	0.731
	No	58 (98.3)	63 (98.4)	121 (98.4)	
Does a partner, or anyone at home, hurt, hit, or threaten you? "Quem vive consigo, ou alguém em casa, magoa-a(o) bate-lhe ou ameaça-a(o)?"	Yes	1 (1.7)	2 (3.1)	3 (2.4)	0.531
	No	58 (98.3)	62 (96.9)	120 (97.6)	
How confident are you filling out forms by yourself? "Qual é o seu grau de confiança para preencher documentos sozinha(o)?"	Not at all	4 (6.8)	7 (10.9)	11 (8.9)	0.443
	Somewhat	5 (8.5)	6 (9.4)	11 (8.9)	
	Extremely	50 (84.7)	51 (79.7)	101 (82.1)	
How confident are you that you can control and manage most of your health problems? "Qual é a sua confiança em conseguir controlar e orientar a maior parte dos seus problemas de saúde?"	2	1 (1.7)	0 (0.0.)	1 (0.8)	0.343
	4	2 (3.4)	2 (3.1)	4 (3.3)	
	5	2 (3.4)	1 (1.6)	3 (2.4)	
	6	1 (1.7)	4 (6.3)	5 (4.1)	
	7	2 (3.4)	4 (6.3)	6 (4.9)	
	8	19 (32.2)	23 (35.9)	42 (34.1)	
	9	10 (16.9)	12 (18.8)	22 (17.9)	
	10	22 (37.3)	18 (28.1)	40 (32.5)	

worsen, the *Social Needs: Patient Questionnaire* also worsens. No significant differences for the Score by gender, males 1.8±1.3 vs 1.4±1.5 females, p=0.069, age group, up to 45 1.4±1.2 vs 1.8±1.6 for older than 46, p=0.122, or multimorbidity, more than two diseases 2.4±1.3 vs 1.7±1.6 less than two diseases, p=0.291. For n=61 (48.8%) of this sample, there was at least one social need.

DISCUSSION

This study aimed, in a trial of cross-cultural adaptation and validation, to European spoken Portuguese, to

TABLE 5. Significant answers according to the median of SEDI

Question English "Portuguese"		SEDI according to median		Total	*p*
		Lower (≤5) *n* (%)	Higher >5 *n* (%)		
Do you have any problems with your housing, such as unsafe/unclean conditions, temporary living, or no place to live? "Tem alguns problemas com a sua habitação, como condições de insegurança/falta de limpeza, estar em habitação temporária ou não ter onde viver?"	Yes	8 (20.0)	2 (2.4)	10 (8.0)	0.001
	No	32 (80.0)	83 (97.6)	115 (92.0)	
How confident are you filling out forms by yourself? "Qual é o seu grau de confiança para preencher documentos sozinha(o)?"	Not at all	4 (10.0)	7 (8.2)	11 (8.8)	0.006
	Somewhat	9 (67.5)	2 (2.4)	11 (8.8)	
	Extemely	27 (67.5)	76 (89.4)	103 (82.4)	
How confident are you that you can control and manage most of your health problems? "Qual é a sua confiança em conseguir controlar e orientar a maior parte dos seus problemas de saúde?"	2	0 (0.0)	1 (1.2)	1 (0.8)	0.010
	4	2 (5.0)	2 (2.4)	4 (3.4)	
	5	2 (5.0)	1 (1.2)	3 (2.4)	
	6	3 (7.5)	2 (2.4)	5 (4.0)	
	7	1 (2.5)	6 (7.1)	7 (5.6)	
	8	19 (47.5)	24 (28.2)	43 (34.4)	
	9	6 (15.0)	16 (18.8)	22 (17.6)	
	10	7 (17.5)	33 (38.8)	40 (32.0)	

analyse patients' social needs according to sex, age, multimorbidity, and socio-economic class, using a standard questionnaire. It was hypothesised that women, older ones, those living in a worse socioeconomic class, and those with multimorbidity would have more SDH needs.

SDHs had not yet been studied in the Portuguese population using this methodology, nor was their association with gender, age, and multimorbidity and socio-economic class known.

The correlation between SEDI and the SDH questionnaire score was negatively moderate and significant. In a young sample (up to 65 years old), SDHs are transversal, meaning that General Practice/Family Doctors must be aware of this population problem, classifying it in the e-registration program.

Women showed more concern than men on some matters: providing food and supporting medical care expenses. This might mean they are responsible for this task at home, or that men are careless about this subject.

To the question "In the last 12 months, have you ever run out of food and had no money to buy more?", the younger group scored higher, probably because women were predominant in this age group sample.

Although the difference between genders about housing problems was not statistically significant, 8.1% of our sample was in a 'Temporary Housing' situation, with younger individuals significantly more likely to respond. This question needs further understanding, for 'Temporary Home' might mean living with parents, or a kind of nomadic lifestyle, for instance, when having labour instability.

Men showed more independence in filling in documents by themselves; women scored higher in their ability to find solutions to health struggles, and patients from a lower socio-economic background also revealed

less confidence in filling in documents independently and in overseeing and dealing with their health problems. This can then lead to lower adherence to medication and to a lesser ability in therapeutic maintenance, resulting in poorer outcomes.[18]

There is evidence suggesting overall positive perceptions towards implementing a Social Prescribing Link Worker Service (SPLS), with recognized benefits for patients, health services, community development, and professional satisfaction.[19] Patients do not benefit from social prescribing only because they have a lower socio-economic status, but also because it keeps them more connected with each other and actively engaged in their community. However, attention to identified barriers and challenges will be crucial for successful implementation.[19]

For this research, we used the *Social Needs: Patient Questionnaire* created by the American Academy of Family Physicians.[5] The original questionnaire underwent a rigorous method of cross-cultural adaptation, with no difficulties being encountered in this process, and a test-retest methodology revealed no significant differences. The questionnaire was also easy to understand. And it revealed a reality that General Practice/ /Family Doctors in Portugal must attend to for better health results and outcomes.

Although the Graffar index is currently used as a tool to assess the patient's socio-economic status in Portuguese Family Practice appointments, as it is the instrument in use in the e-registration health program used in the Portuguese National Health Service, it was decided to use the SEDI, due to less filling in time. A high correlation between these two instruments has been perceived; the latter is easier and faster to apply – three questions with a final score from 3 to 6 points.[20]

The fact that the questionnaire was presented to the participants in an online form prevented the occurrence of some biases, like the social desirability and response momentum bias. The online methodology may have resulted in somewhat distorted results for info-excluded persons, or those not being regular users of the internet were not represented do distorting these results, perhaps reducing the amount of those in social needs. Still, had it been presented to the participants in person, they might not have been able to accurately state their characteristics to the SEDI calculation. Electronically, they are more assured of their anonymity. If it had been distributed at the end of appointments, it is possible that they would have been in a hurry to leave and would not have been truly available to answer the questionnaire carefully. To overcome this bias, it was decided to distribute the questionnaire online. A greater convenience sample was also believed to be reached. In 2023, social needs were electronically observed. A study of pre-partum women found the importance of discovering these unmet social needs either by a short questionnaire or incidentally, when a patient-centred approach was considered.[21]

Although this study fulfilled its objectives, continuous validation and even contrast with health results and outcomes are desired.

In fact, the *Social Needs: Patient Questionnaire* studies an important of the context in which a GP works. In contends with several matters like referrals, when needed, to social workers. More in-depth studies on results and outcomes are needed for the context, even with the most appropriate medical management, is paramount, 50% of health being related to non-medical health drivers, 30% with genetics and 20 % health care access and its quality.[22-23]

CONCLUSION

It was possible to perform the cross-cultural adaptation and validate the *Social Needs: Patient Questionnaire* for the under-65 years population.

Not significantly, females did not suffer more, older ones suffered more, and those living multimorbidity suffered more of SDH needs. Worse socioeconomic class negatively moderately and significantly correlated with social needs.

There seems to be a need to integrate social needs into healthcare tactics to improve patient outcomes and overall well-being.

By promoting a more inclusive and patient-centered approach to care, healthcare practitioners and policymakers ensure that healthcare services meet the diverse needs of individuals across a wide socioeconomic circumstance.

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AUTHORS CONTRIBUTION

Conceptualization, MMJ, JRBM, and LMS; methodology, MMJ, and LMS; software, MMJ, and LMS; validation, MMJ, and LMS; investigation, MMJ, and LMS; resources, MMJ, and LMS; data curation, LMS; writing—original draft preparation, MMJ, and LMS; writing—review and editing, MMJ, JRBM, and LMS; supervision, LMS. All authors have read and agreed to the published version of the manuscript.

CONFLITO DE INTERESSES

Os autores declaram não possuir quaisquer conflitos de interesse.

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RESUMO

ADAPTAÇÃO CULTURAL E VALIDAÇÃO DE NECESSIDADES SOCIAIS: QUESTIONÁRIO DA PESSOA PARA O PORTUGUÊS FALADO NA EUROPA

Objetivos: Adaptar e validar culturalmente o questionário *Needs Social: Patient Questionnaire* (SN-PQ) para o português europeu em indivíduos com idades entre os 18 e os 65 anos.

Métodos: Estudo observacional por adaptação cultural e validação convergente. Após tradução, verificação linguística e retrotradução, a consistência interna foi estudada em 19 indivíduos. Na fase de validação foi feito convite nas redes sociais para a resposta no Google Forms. Como variáveis de contexto usaram-se o sexo, o Socioeconomic Deprivation Index (SEDI) e sofrer de multimorbidade. Calculou-se o somatório do SN-PQ, que quanto maior mais necessidades sociais significava.

Resultados: A correlação entre o SEDI e SN-PQ foi negativa moderada e significativa, ρ=-0,415, p<0,001. A mulher mostrou mais frequentemente preocupação com as despesas com alimentos e cuidados médicos que o homem, p=0,027 e p=0,007, respetivamente. Pessoas em melhor estado socioeconómico mostraram menos problemas de habitação, p=0,001, mais confiança em completar documentos sozinhos, p=0,010, e lidar com problemas de saúde, p=0,010. Para n=61 (48,8%) desta amostra havia pelo menos uma necessidade social, sendo mais frequente a preocupação com despesas (49,6%) de transporte para e de consultas médicas. Não foram encontradas diferenças por sexo, p=0,069, grupo etário, p=0,122, ou por sofrer de multimorbidade, p=0,291.

Discussão: Este é o primeiro estudo português a abordar as necessidades sociais de saúde, enfatizando-se a pertinência de estudos adicionais para uma compreensão mais profunda da relação entre as necessidades sociais da pessoa e as consequências em saúde.

Conclusão: Nesta amostra, obtida *online,* 48,8% das pessoas relataram pelo menos uma necessidade social que deve integrar a abordagem da Pessoa em cuidados de saúde primários para serem alcançados melhores resultados. Melhor classe socioeconómica significou menor índice de necessidades sociais.

Palavras-chave: Necessidades sociais; Paciente; Saúde; Socioeconomia.