RIASE

REVISTA IBERO-AMERICANA DE SAÚDE E ENVELHECIMENTO
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SOCIAL NETWORKS AND THE HEALTH PERCEPTION OF THE ELDERLY LIVING IN CITIES IN THE INTERIOR OF PORTUGAL

AS REDES SOCIAIS E A PERCEÇÃO EM SAÚDE DOS IDOSOS QUE RESIDEM EM CIDADES DO INTERIOR DE PORTUGAL

LAS REDES SOCIALES Y LA PERCEPCIÓN DE LA SALUD DE LAS PERSONAS MAYORES QUE VIVEN EN CIUDADES DEL INTERIOR DE PORTUGAL

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ABSTRACT

Introduction: During the aging process, the elders experience changes in their social networks, in their physical conditions with implications for their health, whose perception may not correspond to their real state. Our objective was to evaluate the dimension and frequency of contacts on social networks, as well as an analysis of the health perception of elderly people living in the community, in an urban environment in the interior of Portugal.

Methods: The data were collected from 202 individuals aged 65 or over, through a questionnaire, applied by face-to-face interview, proceeding to an analysis of the data using descriptive statistical methods (frequencies, measures of central tendency and dispersion).

Results: Most respondents live alone, with 87.1% reporting they have help in facing a future disability, but 54.0% are not satisfied with the frequency of family relationships. Self-perceived health is more negative for the past 12 months and more positive when assessed at present. They report that 68.8% of respondents did not integrate social and recreational activities in the last 6 months.

Conclusion: The urban elderly people have small social networks and a more negative or positive perception of health, not only being dependent on the experienced limitation. Investment in activities that promote higher levels of social participation is essential, aiming at maintaining social networks and a more positive self-assessment in health.

Keywords: Aging; Health Perception; Social Network; Social Participation.

RESUMO

Introdução: Durante o processo de envelhecimento os idosos experienciam alterações das suas redes sociais, das suas condições físicas com implicações no estado de saúde, cuja perceção pode não corresponder ao real estado da mesma. O objetivo foi avaliar dimensão e frequência dos contactos nas redes sociais, assim como, uma análise da perceção em saúde dos idosos residentes na comunidade, em meio urbano do interior de Portugal.

Métodos: Foram recolhidos dados de 202 indivíduos com 65 ou mais anos, através de um questionário, aplicado por entrevista de forma presencial procedendo-se a uma análise dos dados através de métodos de estatística descritiva (frequências, medidas de tendência central e de dispersão).

Resultados: A maioria dos inquiridos reside sozinha, com 87,1% a referirem ter ajuda perante incapacidade futura, mas 54,0% não estão satisfeitos com a frequência dos relacio-

namentos familiares. A auto-perceção da saúde é mais negativa para os últimos 12 meses e mais positiva quando avaliada no presente. Referem não ter integrado atividades sociais e recreativas nos últimos 6 meses 68,8% dos inquiridos.
Conclusão: Os idosos urbanos apresentam redes sociais de pequena dimensão e uma perceção em saúde mais negativa ou positiva, não estando apenas dependente da limitação experienciada. É fundamental um investimento em atividades que promovem níveis mais altos de participação social, visando a manutenção das redes sociais e uma auto-avaliação em saúde mais positiva.
Palavras-chave: Envelhecimento; Participação Social; Perceção em Saúde; Rede Social.

RESUMEN

Introducción: Durante el proceso de envejecimiento, los adultos mayores experimentan cambios en sus redes sociales, en sus condiciones físicas con implicaciones para su salud, cuya percepción puede no corresponder a su estado real. Nuestro objetivo era evaluar la dimensión y frecuencia de los contactos en las redes sociales, así como un análisis de la percepción de salud de las personas mayores que viven en la comunidad, en un entorno urbano en el interior de Portugal.
Métodos: Se recopilaron datos de 202 personas de 65 años o más, a través de un cuestionario, aplicado mediante entrevista personal, procediendo a un análisis de los datos utilizando métodos estadísticos descriptivos (frecuencias, medidas de tendencia central y dispersión).
Resultados: La mayoría de los encuestados viven solos, con un 87,1% que informa haber recibido ayuda ante una discapacidad futura, pero el 54,0% no está satisfecho con la frecuencia de las relaciones familiares. La salud autopercibida es más negativa en los últimos 12 meses y más positiva cuando se evalúa en la actualidad. Informan que el 68,8% de los encuestados no integraron actividades sociales y recreativas en los últimos 6 meses.
Conclusión: Los ancianos urbanos tienen pequeñas redes sociales y una percepción más negativa o positiva de la salud, no solo dependen de la limitación experimentada. La inversión en actividades que promuevan niveles más altos de participación social es esencial, con el objetivo de mantener las redes sociales y una autoevaluación más positiva en salud.
Descriptores: Envejecimiento; Participación Social; Percepción de la Salud; Red Social.

INTRODUCTION

Currently, in Portugal, there is a noticeable aging of the population, resulting from the combination of factors such as increased longevity, decreased birth rate and a negative migratory balance[1].

In Portugal, there is a demographic aging across all regions of the country, with a special focus on the Central and Alentejo regions[1]. In this context, in 2018, the aging rate in the country was 157.4. More specifically, in the Central region, for every 100 young people there are about 196 elderly people, while in Alentejo this figure rose to 201[2].

The impact that these changes in the age structure will have on society depends, fundamentally, on the adoption of policies that meet this new reality[3]. It is in this sense that active aging emerges as an effective strategy, in which countries that are struggling with this issue must bet, enabling sustainable aging[4]. The active aging concept is based on three pillars: safety, health and social participation. It does not refer only to the promotion and maintenance of the health of the aging population, such as the absence of co-morbidities, but rather as a concept that encompasses not only physical health, but also mental health, social and cultural factors in the context of the elderly people[4,5]. It highlights the importance of the community, the family and the social ties established by the elders in the way they grow old, emphasizing the need to include this population socially and promote their participation in collective life[6,7].

Paúl, Fonseca, Martín and Amado (2005)[8] observed that the elderly people who live in the community were characterized, in addition to low income and educational qualifications, by an extensive, predominantly informal support network that includes family, friends, neighbors and confidants. The informal support network is seen as fundamental for maintaining autonomy, higher levels of mental health and satisfaction with life[9]. In particular, family relationships are the main sources of support for the older adults, followed by relationships established with friends and neighbors[6]. Also belonging to a social group (whether community, political, religious or sports) contributes to the well-being and quality of life of the elderly people. However, more than the dimension of the network or belonging to a social group, it is necessary to look at the quality of the relationships that are established, with a relationship between their frequency and quality with well-being and happiness[10].

During the aging process, there is an impoverishment of these networks, as a consequence of changes in family contexts (widowhood situation, among others), work (retirement), friends and neighborhood, making it difficult to maintain the elderly in the midst of com-

munity[11]. In turn, low levels of social integration provide social isolation and, consequently, the presence of feelings of loneliness, predisposing the elders to the disease and contributing to the mortality rate[12].

The way in which individuals occupy their time and the relationships they establish with others (mainly, positive and stable social relationships) are determining conditions for their health status and their perception[7]. During the aging process, a decline in health status is observed, as a consequence of the development of chronic diseases that end up conditioning the daily life and the autonomy of the elderly people[6,13]. Also, the assessment of health status worsens during advancing age; however, the perception of this does not follow the real state of health, and may be more positive or more negative. This disparity depends on several psychosocial factors present at the time of self-assessment[13]. It has been found that those who have good relations with others tend to develop fewer diseases, to live longer and to experience higher levels of satisfaction with life. In turn, those elders who have more friends have more people to talk to while those who have a greater frequency of contacts with friends feel healthier and happier[10].

Machón and collaborators[14] observed, among others, that not participating in social activities is a predictor of a negative perception of health status. Also, factors such as being a woman, low levels of education and socioeconomic status contribute to a negative assessment[6].

In maintaining ties and social life, elderly people who age in an urban environment also tend to face barriers and conditions related to the environmental context, which, combined with the physical and cognitive decline that characterize old age, make it even more difficult maintenance of social networks and, consequently, their involvement in the community, contributing to their isolation and further decline[15].

Thus, urban elderly people seem to be exposed to situations of social isolation and, consequently, to feelings of loneliness, worse levels of health and perception of it and low satisfaction with life. Thus, this study aims, mainly, to analyze the social networks and the perception of health in elderly residents in the community, in an urban environment.

METHODOLOGY

This is a cross-sectional exploratory study, integrated in the PerSoParAge Research Project (POCI-01-0145-FEDER-023678) – "*Personal and social resources for autonomy and social participation in an aging society*".

For this study, the non-probabilistic sample was used, which is characterized by the selection of subjects taking into account intentional choice criteria. Elderly people aged 65 and over, residing in the community in the cities of Castelo Branco, Guarda and Portalegre and who have not presented alterations in cognitive function, were assessed through preliminary assessment questions that are part of the data collection instrument. To establish contact with the elderly people, they were approached on the street or were contacted through protocols established with entities and neighborhood associations. The data collection was carried out between the months of August and November 2018, through a questionnaire applied by face-to-face interview. On average, the application of the questionnaire lasted 60 minutes and consisted of 287 questions spread over 27 areas. However, for this study, only questions that refer to the field of sociodemographic characterization, social networks, physical health, mental health and social and recreational services were used. It should be noted that this instrument was previously validated, through a pre-test and applied as a data collection instrument for the elaboration of the Gerontological Plan of the Municipality of Idanha-a-Nova, Castelo Branco district.

To survey social networks the questions were used, "*How many people, counting on you, currently live in this house?*", "*Last week, how many times did you call or receive calls from friends, family or others?*", "*Last week how much time have you spent with someone you don't live with?*" and "*How many people do you know enough to go to their house to visit them?*" "*Is there anyone you can trust?*", "*Do you feel alone?*", "*Is there anyone who can help you if you become ill or disabled?*", "*Do you see your family members as often as you would like?*" and "*How often, on average, do you keep in touch with family members who don't live with you?*" In turn, the question "*In the last six months have you participated or are you still participating in any activity organized by a local group, parish, parish council or city council?*" was used to survey social and recreational services. In terms of health, the questions "*In the past twelve months, how would you define your health status?*", "*In the last six months, have you been limited in carrying out your daily activities, due to a health problem?*" and "*How do you evaluate your health, in general, at this moment?*". Finally, the question "*How would you describe your satisfaction with life in general?*" to survey the state of mental health.

As for ethical aspects, the oral consent was requested from participants after the study was explained. The anonymity and confidentiality of all data collected was maintained. The questionnaires and data were identified only by codes and the information collected was collectively treated and statistically analyzed only by the researchers.

The data obtained were analyzed using the *Software Statistical Package for the Social Sciences Statistics* (SPSS), version 24 for Windows 10. For the description of the variables, descriptive statistics was used through frequencies (with percentages), for categorical variables and measures of central tendency (mean) and dispersion (standard deviation) for continuous variables.

RESULTS

The study included 202 individuals, most of them female (55.4%) and members of the age group of 65 and over (Table 1).

Table 1 – Sociodemographic characterization of the sample.

Variables		Frequency	Percentage
Sex of the participants	Female	112	55.4%
	Male	90	44.6%
Marital status	Single	6	3.0%
	Married or de facto union	101	50.0%
	Widow/widower	85	42.1%
	Divorced/ separated	10	5.0%
Education	Can't read or write	13	6.4%
	Can read and write without a degree of study	13	6.4%
	1st Cycle	116	57.4%
	2nd Cycle	14	6.9%
	3rd Cycle	17	8.4%
	High School	15	7.4%
	Higher Education	10	5.0%
Monthly income	<439€	56	27.7%
	440€ a 580€	32	15.8%
	581€ a 1160€	39	19.3%
	>1161€	11	5.4%
	NS/NR	49	24.3%
Age		N	Mean±Standard Deviation
Age group	65-79 years-old	135	71.87±4.17
	80 and older	67	85.12±3.99

Regarding marital status, 50.0% of the respondents are married or live in a de facto union and 42.1% are in a widowhood situation. About educational qualifications, (57.4%) have the 1st cycle, followed by 8.4% with the 3rd cycle and 7.4% with secondary education. Asked about their economic situation, it was found that 27.7% of respondents have income <439€ while 19.3% stated that they are between 581€ and 1160€ .

According to the results shown in Table 2, on average, 1.71±0.81 people live in the respondents' homes. Regular contacts are made with third parties, either in person or by telephone. As for the number of people with whom the respondents feel comfortable to visit/receive their visit, this varies widely among respondents, with an average of 9.21±23.56 people.

Table 2 – Household size and average frequency of contacts established between elements of social networks.

Variables	N	Mean±Standard Deviation
No. of people who they live with	202	1.71±0.81
No. of visitable people	201	9.21±23.56
No. of calls (made or received) in the last week	199	5.66±6.52
No. of times they enjoyed the company of others in the last week.	201	4.09±4.32

We observed the existence of trust relationships within informal social networks, with the majority of participants reporting having someone they trust (93.1%), and whom to turn to in case of future incapacity, also expressing low levels of loneliness (Table 3).

They are dissatisfied with the frequency of contacts with their family. Particularly, regarding the frequency and type of contacts (personal or telephone) that they maintain with their children: daily, only 32.2% reported having personal contact and 48.5% telephone contact. As for personal/telephone contact established with other family members, this was less frequent: 26.2% maintained personal contact less than once a month, while 18.3% spoke via telephone, once a week.

As for the integration of respondents in socio-cultural activities, there was a low level of social participation by the elderly people, with the vast majority stating that they had not participated in any activity organized by groups/associations/municipalities in the last 6 months.

Table 3 – Social relations of trust, perception of loneliness and future support and social participation.

Variables		Frequency	Percentage
Have someone who can trust in	Yes	188	93.1%
	No	11	5.4%
Loneliness feelings	Usually/ always	29	14.4%
	Sometimes	56	27.7%
	Almost never/never	110	54.5%
Help in case of future disability	Yes	174	86.1%
	No	22	10.9%
Satisfaction with frequent family relationships	Yes	87	43.1%
	No	109	54.0%
Participation in recreational activities in the locality where you live in the last 6 months	Yes	64	31.7%
	No	135	68.8%

With regard to the respondents' health (Table 4), they presented a more negative self-perception when they evaluated it in the last year and more positive when asked for their self-assessment when the questionnaire was applied. However, only a minority (3.7%) reported having no limitation as a result of health problems in the last 6 months.

In terms of satisfaction with life, more than half of the respondents classified it as "regular" followed by a positive rating.

Table 4 – Perception of health, severity of limitation and classification of life satisfaction.

Variables		Frequency	Percentage
Perception about health (in the last 12 months)	Very good	17	8.4%
	Good	24	11.9%
	Normal	107	53.0%
	Bad	49	24.3%
	Very bad	5	2.5%
Gravity of limitation (in the last 6 months)	Severely limited	18	8.9%
	Limited but not severely	107	53.0%
	It's not limited	76	3.7%
Current health perception	Very good	12	5.9%
	Good	71	35.1%
	Regular	95	47.0%
	Bad	24	11.9%
Satisfaction with life	Good	79	39.1%
	Regular	105	52.0%
	Bad	14	6.9%

DISCUSSION

This study aimed to survey social networks (size and frequency of contacts) and the perception of health in elderly people residents in the community, in the cities of Guarda, Castelo Branco and Portalegre. It also assessed the presence of relationships of trust, the levels of loneliness and perceived life satisfaction.

The informal social support networks of the elders comprise the family, which includes the spouse and extended family, friends, neighbors and confidants(16). Wang (2014)(17) studied the extension of informal social networks of the elders, with these ones integrating, on average, 30 individuals. This value is clearly much higher than that observed in the present study. However, it is necessary to have in mind that the question formulated in Wang's work was more general ("people who are important to you"), as well as, it was a sample with a lower average age (65.32 years-old) , which may have influenced the results. The small size of social networks observed in the study population is in line with what is reported in the literature, with this decrease being the result of the presence of several factors inherent to the aging process(6).

However, more important than the extension of the networks, it is the quality of the interpersonal interactions that are established that appears to be the most relevant characteristic when evaluating them(10). According to the theory of socio-emotional selectivity, the elderly people, when they realize their limitations and finitude, become more selective in the choice of the elements that integrate their social networks, establishing more emotionally significant relationships(18). In this study, the vast majority of participants stated that their social networks integrated someone they trusted. The establishment of this type of relationship means that respondents have someone with whom to share their concerns, problems and talk about more intimate issues(6).

The presence of a family network becomes particularly important when the older adult lives alone, as seen in the present study. In this context, the vast majority of respondents demonstrate that they are not satisfied with the frequency of contact they establish with their family members. In an investigation conducted by the Royal Voluntary Service (2012), 17% of the elderly respondents stated that they did not see their children as much as they would like, with 50% saying that their children were too busy to visit them(19).

The absence or insufficiency of family contact increases the development of negative feelings such as loneliness – this is considered as a real problem for the elderly Portuguese population(10,19). Although the majority of respondents say "almost never/never" feel lonely, a considerable percentage of them have experienced, more often, loneliness. Savikko and colleagues(20) also observed similar results. They concluded that the most frequent causes for older adults to feel alone were: the presence of diseases, widowhood, low number of friends and the perceived quality of the relationships established.

In addition to the frequency of contacts with others, Paúl defines two more fields that make up social networks: the support received, which refers to the help that is provided by the elements that make up the network and the perceived support that concerns the belief that, if necessary, significant others will help(5). It is family members who, in about 80% to 90% of cases, ensure the care of older people(16), with Fonseca(3) stating that these support networks are characterized by insufficient family support. Thus, given the fact that the vast majority of study participants state that they have someone to turn to in case of future disability, they can demonstrate a wrong perception, which does not respond to reality. That is, they may not have experienced situations in which, due to limitations, they needed to resort to this type of help.

In the case of health, social networks are very important in situations of illness, with this being considered as a deeply social experience(10). In the older population, this factor has more expression since they tend to experience a decline in health status. However, the

elders' perception of their health may not correspond to the real state[3,13]. In the results of the study sample, there was a variation in the assessment of health status, experiencing it as more negative in the last year and more positive at the time of assessment. In addition, the majority of respondents reported having experienced some degree of limitation in performing their ADL ("severely limited/limited but not severely), in the last 6 months as a result of health problems. These data reinforce the current idea in the literature that the perception of health may not respond to its real state, with the presence of certain psychosocial factors at the time of the evaluation to be determinants for a more positive or negative self-perception in health[13,21].

Factors such as the presence of chronic diseases, low education, female gender, degree of dependence on activities of daily living and marital status, can have a negative influence on this self-assessment[22]. However, the sociodemographic profile only allows part of this subjective assessment to be explained. The dimension of the network and the level of social participation also seems to influence the perception of health, insofar as the larger the size of the social network and the higher the degree of participation in social activities, the more positive the evaluation tends to be[6].

The associative and civic participation appears, through the promotion of activities and spaces of sociability that target the elderly population, as a strategy that contributes to the maintenance of social networks and their quality, as well as a way to combat isolation, feelings depression and loneliness in this population[23]. It does not only allow the elders to get involved in the community in which they are inserted, but also provides for inclusion in the family, improving their motivation and self-esteem[24]. It also contributes to the creation of relationships of friendship and intimacy, as well as bonds between individuals who share a collective identification and feel an integral part of the community[10].

Despite the different benefits of social participation in terms of social relationships and health perception, the majority of respondents in the study do not participate in these types of activities. This figure follows the trend observed in Portugal, which ranks 21st in Portugal in the "Social Participation" indicator in the Active Ageing Index[25]. This low participation can be justified by the characteristics inherent to these activities and which are described in the research work of Bárrios Fernandes[23]. They found that despite the concern of the regions under study (particularly Guarda and Castelo Branco) in promoting successful aging, through the creation and implementation of several programs, they found that they have weaknesses: they are essentially based on the age criteria to the detriment of the real needs of the elderly, and age-related attitudes underlying these programs, constituting a barrier to participation and integration[23].

Particularly in an urban environment, the fact that participating in these activities implies that the elderly people have to move can contribute to this low participation rate. This task can be a challenge for the urban older population, because associated with difficulties in mobility, there are, in urban areas, architectural and environmental barriers that hinder the elderly people's displacement. In many cases, they remain confined at home[3,15].

Social participation seems to be fundamental for a good satisfaction with life. Particularly, Hernándes and collaborators[26] observed positive levels of satisfaction with life in their sample. They stated that between 70 and 74 years-old, satisfaction with life increased, justifying the results with the high social participation that he observed in this age group. Taking into account the levels of participation observed in our sample, it does not seem to explain the results obtained in life satisfaction. This author also found that the levels of satisfaction with life decreased after 80, due to lack of motivation and low expectations, reinforcing the need to create activities that favor the continuous personal and social development of the older adults[26].

Social networks are very important in maintaining psychological well-being and in the level of life satisfaction of the elderly population, functioning as a protective factor against stressful situations inherent to the aging process and contributing to their maintenance in the community[8,17]. Despite the fact that social networks decrease with age, as a result of the decline in health status, the loss of family and friends, it is necessary to encourage the replacement of lost social contacts, which can be achieved through social participation. The establishment of more social ties will encourage participation in more activities, as well as promoting better levels of health and satisfaction with life[10,26].

Study limits

This study has some limitations that make it difficult to generalize the results, such as the fact that the sample size is not representative. It is a cross-sectional study that prevents documenting the evolution of the variables under study. No studies have been carried out on the relationship between variables and, yet, a detailed analysis on the nature of social networks (whether family, friends, neighbors or formal networks) has not been carried out. Still, the interpretation of the results should take into account that it portrays elderly people living in an urban community in the countryside of Portugal.

CONCLUSION

The elderly people who live in the community, in cities in the countryside of Portugal, seem to have small social networks, but they have relationships of trust, with the quality of the ties established that are presented as the most important characteristic in the evaluation of social networks. In particular, they are dissatisfied with the frequency with which they establish contact with their family network, which plays an important role in providing care to the older population and in combating feelings of loneliness.

With regard to their assessment of their health status, there is a more negative self--perception when evaluated in the last year and more positive when evaluated in the present, although the majority of respondents report having experienced some level of limitation, consequence of their state of health. These data reinforce the idea described in the literature that the perception of health is also influenced by the presence of psychosocial factors present at the time of self-rated health.

Social participation emerges not only as an important strategy for maintaining social ties, which tend to be lost during this phase of life, as a factor that positively influences the perception that the elders have of their health. The low levels of adherence verified in this study seem to refer not only to the weaknesses associated with them, but also due to the existence of barriers inherent to the urban environment.

It is noticeable the importance that the establishment of bonds with others in the promotion of active aging, for this, the creation of more activities (appropriate and of interest to the elderly) in the community should be encouraged. Further studies that deepen these research questions are needed.

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