
QUALITY OF LIFE IN INDIGENOUS AND NON-INDIGENOUS OLDER PERSONS IN THE NORTH OF CHILE

Lorena P. Gallardo-Peralta, Esteban Sánchez-Moreno and Vicente Rodríguez-Rodríguez

SUMMARY

*O presente estudo analisa as diferenças nos distintos domínios da*The present study analyses differences in Quality of Life (QOL) in their different domains among indigenous and non-indigenous older persons in Chile. The sample was made up of 777 older Chilean people, including 232 indigenous (Aymara) participants. The WHOQOL-BREF scale was used. Data were processed with standard statistical tests (chi square and Student's t-test). Significant differences were found in the QOL domains according to ethnicity. Non-indigenous older persons felt pain more often than Aymaras (16

vs 9%), needed more medical treatment (24 vs 13%). In the social relationships domain, non-indigenous participants were more satisfied than the indigenous group with personal relationships (63 vs 50%) and with social support from friends (45 vs 33%). Non-indigenous participants reported a higher level of satisfaction with living and household conditions (64 vs 55%) and with social and healthcare services (59 vs 47%). The relevance of ethnicity for QOL is addressed using the WHOQoL-BREF. Social inequalities related to ethnicity could help to explain the findings.

Introduction

Ethnicity is a particularly significant element in evaluating quality of life (QOL) in the case of older persons (Zang *et al.*, 2016). Various studies have addressed the discrepancies between different ethnic groups, generally created as a result of migratory movements (Moriarty

and Butt, 2004). However, studies examining older persons of ethnic minorities or focused on them are rather scarce (Shah *et al.*, 2008). Moreover, there is little evidence regarding ethnic differences in QOL in the case of indigenous groups; that is, groups that are a minority in their natural and original living context. In the precise

issue of indigenous natives of Chile, some studies partially assess the wellbeing in such groups and empirical evidence shows potential social risk situations: dependency, problems related to areas of mental functions and communication, worsening perception of quality of life related with health, prevalence of depressive symptoms mainly in

women (Mella *et al.*, 2003; Gallardo-Peralta *et al.*, 2015).

The aim of the present study was to analyse differences in QOL and its different domains (physical, psychological, level of independence, social relationships and environment) among indigenous and non-indigenous older persons in Chile, where it is estimated that persons

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CALIDAD DE VIDA EN PERSONAS MAYORES INDÍGENAS Y NO INDÍGENAS RESIDENTES EN EL NORTE DE CHILE

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RESUMEN

En el presente estudio se analizan las diferencias en los distintos dominios de la calidad de vida (QOL) entre las personas mayores indígenas y no indígenas de Chile. La muestra está compuesta por 777 personas mayores chilenas, incluyendo a 232 indígenas (aymaras). Se utilizó la escala WHOQOL-BREF. Los datos se procesaron con pruebas estadísticas estándar (Chi cuadrado y prueba t de Student). Se encontraron diferencias significativas en los dominios del QOL según la pertenencia étnica. Las personas mayores no indígenas a menudo sienten más dolor que los aymaras (16 vs 9%), necesitaron más tratamiento mé-

dico (24 vs 13%). En el dominio de las relaciones sociales, las personas no indígenas están más satisfechas que los indígenas con sus relaciones sociales (63 vs 50%) y con el apoyo social de los amigos (45 vs 33%). Los participantes no indígenas reportan un mayor nivel de satisfacción con las condiciones de vida y del hogar (64 vs 55%) y con los servicios sociales y de salud (59 vs 47%). La relevancia de la etnicidad en la evaluación de la calidad de vida (QOL) se prueba utilizando el WHOQOL-BREF. Las desigualdades sociales relacionadas con la etnicidad podrían ayudar a explicar estos hallazgos.

QUALIDADE DE VIDA EM PESSOAS MAIS VELHAS INDÍGENAS E NÃO INDÍGENAS RESIDENTES NO NORTE DO CHILE

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RESUMO

O presente estudo analisa as diferenças nos distintos domínios da qualidade de vida (QoL) entre as pessoas mais velhas indígenas e não indígenas do Chile. A amostra está composta por 777 pessoas mais velhas chilenas, incluindo 232 indígenas (aymaras). Utilizou-se a escala WHOQoL-BREF. Os dados foram processados com provas estatísticas padrão (Qui quadrado e a prova t de Student). Encontraram-se diferenças significativas nos domínios do QoL de acordo com a etnia. As pessoas mais velhas não indígenas com frequência sentem mais dores do que os aymaras (16% versus 9%), precisaram de mais tratamentos

médicos (24% versus 13%). No domínio das relações sociais, as pessoas não indígenas estão mais satisfeitas do que os indígenas com suas relações sociais (63% versus 50%) e com o apoio social dos amigos (45% versus 33%). Os participantes não indígenas relatam um maior nível de satisfação com suas condições de vida e com o ambiente do lar (64% versus 55%), com os serviços sociais e de saúde (59% versus 47%). A relevância da etnia na avaliação da qualidade de vida (QoL) é testada utilizando o WHOQoL-BREF. As desigualdades sociais relacionadas com a etnia poderiam ajudar a explicar estas descobertas.

aged over 60 years comprise 17,5% of the population. In order to do so, it analyses differences in QOL between the indigenous Aymara population (the second largest group of native population in Chile) and the non-indigenous population in Northern Chile.

Methods

The sample was made up of 777 older Chileans living in the region of Arica and Parinacota, in the far north of Chile. Table I contains the essential characteristics of the participants. The study used the WHOQOL-BREF scale (WHOQOL Group, 2008) and the internal consistency index (Cronbach's alpha) for the general questionnaire was 0.89. It should be noted that this ins-

trument has been previously validated for elderly Chilean people (Espinoza *et al.*, 2011). The questionnaire was applied via personal interviews, having first obtained the informed consent of participants. Qualified social workers and psychology professionals administered it between June and August 2015. The Ethics Committees of the Universidad de Tarapacá and of the National Council for Science and Technology of Chile approved and monitored the ethical aspects of the study. Data were processed with standard statistical tests (chi square and Student's t-test).

Results

Significant differences were found in some of the different

Variable	Categories	n (%)
Gender	Women	488 (63%)
	Men	289 (37%)
Age groups	60 - 69 years	430 (55%)
	70 - 79 years	260 (34%)
	≥ 80 years	87 (11%)
Marital status	Married or cohabiting	370 (48%)
	Single and/or divorced	228 (29%)
	Widow	179 (23%)
Education	Primary school incomplete	70 (9%)
	Primary school	319 (41%)
	High school or vocational education	319 (41%)
	Higher education	69 (9%)
Ethnicity	Indigenous (Aymara)	232 (30%)
	Non-indigenous	545 (70%)

QOL domains according to ethnicity (Table II). The indigenous group had higher scores in the physical domain of the scale, while the non-indigenous one scored higher in two other domains (social relationships and environment). Further ana-

TABLE II
COMPARISON OF QOL DOMAINS BETWEEN
INDIGENOUS AND NON-INDIGENOUS GROUPS

Domains of the WHOQoL-BREF	Categories	Mean	T(d.f.)	P
Domain I. Physical capacity	Indigenous	9,65	2,266 (775)	0,039*
	Non- indigenous	9,52		
Domain II Psychological	Indigenous	7,35	-0,851 (775)	0,789
	Non- indigenous	7,40		
Domain III Level of independence	Indigenous	8,30	2,970 (775)	0,737
	Non- indigenous	8,11		
Domain IV Social relationships	Indigenous	3,24	-0,810 (744)	0,001***
	Non- indigenous	3,29		
Domain V Environment	Indigenous	3,43	-2,036 (755)	0,007**
	Non- indigenous	3,54		

*p<0,05; **p<0,01; ***p<0,001.

lysis displayed statistical differences for each item of the WHOQOL-BREF scale based on ethnicity (Table III). In the physical capacity domain, non-indigenous older persons felt pain preventing them from doing what they needed to do to a greater extent than the indigenous group. The former needed medical treatment more often in order to function in their daily lives and reported less satisfaction with their capacity to work. In contrast, the non-indigenous group was more satisfied with quality of

sleep than Aymara participants. In the social relationships domain, the non-indigenous group was more satisfied with personal relationships and with social support from friends than the indigenous people. In the psychological domain, the non-indigenous group reported enjoying life more than the Aymara participants.

Finally, in the environmental domain non-indigenous older persons perceived their physical environment as healthy to a greater extent than the Aymara group. The former had su-

fficient money to cover their needs. They had access to the information necessary for daily life and more opportunity to engage in recreational activities. Moreover, they reported a higher level of satisfaction with living and household conditions, and with social and healthcare services. Non-indigenous older persons were also more satisfied with access to transportation means in their neighborhood than the Aymara population.

Discussion

The results obtained for indigenous older persons are positive in terms of physical conditions. In our sample, Aymara persons reported lower incidence of physical pain, less dependence on medical treatment and a higher physical capacity to continue working past 60 years of age than non-indigenous persons. The active lifestyle of the Aymara community may explain these results. It is noteworthy that the older persons in this community continue to work in agricultural, farming and trade jobs until very advanced ages (Carrasco and González, 2014),

in addition to having healthier habits based on their cultural specificity, such as eating food with low fat content (llamas and other camelids) and high levels of protein (quinoa).

However, the results also show that older Aymara people age with worse indicators for other dimensions measured in the WHOQOL-BREF scale. Our study shows that the most disadvantaged areas for this ethnic group are made up of the elements that comprise the environment and social relationships dimensions. These results confirm findings of previous research considering risk indicators in the areas of mental health in indigenous Chileans (Gallardo-Peralta *et al.*, 2015; Mella *et al.*, 2003) without measuring their QOL in a comprehensive manner. In this regard, during their life cycle indigenous persons are more likely to experience certain adverse conditions (such as poverty, discrimination), limited access to opportunities (such as education), and a context of low political and social participation (Gavilán, 2015), which may give rise to higher levels of psychosocial risk in old age. To a large extent, these processes

TABLE III
AGREEMENT (VERY SATISFIED OR SATISFIED) WITH WHOQOL ITEMS ACCORDING TO ETHNICITY

Domain	Item	Non-indigenous %	Indigenous %	Chi-square	P-value
I	Pain and discomfort	16	9	12,580	0,014
	Energy and fatigue	61	60	1,996	n.s.
	Sleep and rest	36	32	12,515	0,014
II	Positive feelings	58	52	13,302	0,010
	Thinking, learning, memory and concentration	48	39	8,501	n.s.
	Self-esteem	59	56	6,751	n.s.
	Bodily image and appearance	82	78	2,720	n.s.
	Negative feelings	10	8	5,794	n.s.
III	Mobility	78	76	9,216	0,056
	Activities of daily living	49	49	5,459	n.s.
	Dependence on medication or treatments	24	13	30,219	0,000
	Work capacity	42	44	15,819	0,003
IV	Personal relationships	63	50	15,427	0,004
	Social support	45	33	20,430	0,000
	Sexual activity	21	18	5,065	n.s.
V	Physical safety and security	54	50	4,737	n.s.
	Home environment	64	55	11,767	0,019
	Financial resources	28	24	21,868	0,001
	Health and social care: accessibility and quality	59	47	11,721	0,020
	Opportunities for acquiring new information and skills	55	44	15,968	0,003
	Participation in and opportunities for recreation/ leisure activities	35	26	15,705	0,003
	Physical environment	63	53	11,560	0,021
	Transport	57	42	17,649	0,001

relate to a situation of cultural and institutional marginalization of indigenous ethnicities in general, and of the Aymara population in particular.

It is important to remark that our results show that average scores for the dimension of social relationships of QOL among non-indigenous elderly people in our sample were higher than scores for indigenous elderly people. This result is especially relevant, given that available evidence suggesting that having good social relations is associated with more wellbeing. In this vein, research conducted by Herrera *et al.* (2011) showed that people with better good family relations who did not have unsatisfactory social relations were more likely to be satisfied with their lives. Along the same lines, previous studies remark the relevance of social relationships for mental health among elderly people in Chile (Gallardo-Peralta *et al.*, 2015).

The persistence of a gap in social inequalities between indigenous and non-indigenous persons in Chile represents a particularly significant factor for maintaining QOL in old age. The problematic elements identified can be improved via the development of effective social policies, particularly in the area of community development, which is of fundamental importance for indigenous ethnicities. These policies would benefit from a culturally specific design incorporating the indigenous cultural practices shown to be positive for QOL, such as commitment to an active life and healthy eating habits.

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