21 - QUALITY OF LIFE AND PHYSICAL FITNESS OF INDIVIDUALS IN THE BRAZILIAN ARMY

ALEX PINHEIRO GORDIA[1]; TERESA MARIA BIANCHINI DE QUADROS[2]; GUANIS DE BARROS VILELA JUNIOR[1,3]
[1]Universidade Federal do Paraná UFPR, Curitiba, Paraná, Brasil
[2]Universidade Estadual de Ponta Grossa UEPG, Ponta Grossa, Paraná , Brasil
[3]Metrocamp, Campinas, São Paulo, Brasil
alexgordia@gmail.com

INTRODUCTION

Nowadays the concept Quality of Life (QL) has been used in two different areas: (1) in the daily language by ordinary people, advertising agents, marketing agents, politicians, professionals of several areas and managers linked to public policies; (2) in the context of the scientific research, in different Sciences such as Physical Education, Economy, Sociology, Education, Medical Sciences, Nursing, Psychology and other specialties related to health. (BOWLING & BRAZIER, 1995; ROGERSON, 1995 apud SEIDL & ZANON, 2004).

Quality of Life can be defined as the individual's perception about his/her position in the life, in the context of culture and of value systems under which he lives, and in relation to his/her objectives, expectations, patterns and concerns (WHOQOL Group, 1995).

The studies concerning QL are very recent, and due to the interdisciplinary and subjective character of the issue, measuring results becomes difficult. Therefore, it is necessary to intensify studies on the theme whose interest has been enhanced only a couple of centuries ago.

The main interfering factors of QL of different groups must be established in order to have a better intervention in QL. Such a process is hindered mainly by cultural, socioeconomic, environmental and individual differences.

The preliminary hypothesis adopted in this study is to corroborate the impact that physical fitness has over health to the values of WHOQOL-Bref physical domain.

The objective of the study is to analyze and reflect on the QL of the individuals serving to two different Brazilian army Barracks, searching for evidence showing the relation between physical fitness, and the QL levels suggested by the four WHOQOL-Bref domains emphasizing the physical domain.

MATERIALS AND METHODS

Sample

The study had transversal character with a sample of the convenient type, because only the individuals who didn't have pre-established tasks for the data collection day participated in the study. The sample was composed of 65 male individuals serving to the Brazilian army, 37 individuals designated in Lapa-Pr city Barracks and 28 individuals designated in Ponta Grossa city Barracks, with the average age varying between 18 and 28.

Explanation and Term of Consent

Before the data collection, for candidates' effective participation, a written notification was sent to each participant. It stated the object of the study and clarified other aspects concerning themes regarding the research, as well as the explanation of eventual doubts. The participants signed the Term of Free and Consensual Consent.

Criterion of Exclusion

The individual can be excluded if he is unable to accomplish the activities proposed by the study in the data collection day, due to any pathology and/or tasks in their respective barracks.

Data Collection and Instruments

The data collection was conducted in November of 2004, at Uvaranas Campus of Ponta Grossa State University (UEPG) and in the Army Barracks settled in Lapa-Pr city, respectively for the individuals from Ponta Grossa-Pr and Lapa-Pr city.

At first the World Health Organization abbreviated questionnaire (WHOQOL-Bref) was carried out and soon afterwards the selected volunteers were submitted to anthropometric, corporal composition, cardio respiratory aptitude, and upper limbs isometric strength evaluations.

1. Anthropometric Evaluation: The corporal mass was obtained through a *Filizola* brand scale, with an accuracy of 100g. The volunteers were weighed standing up, barefoot and wearing tank-tops and shorts. The stature was verified through a statiometer, following Lohman et al. (1988) guidance.

2. Corporal composition: The suprailiac and abdominal tricipital cutaneous folds were measured. To evaluate the fat percentage and corporal density, the equations described by Guedes (1994) and Siri (1961), respectively, were used.

3. Test cardio respiratory: The Cooper test was conducted, 2400m, in order to measure the $VO2_{máx}$. Test procedures: The test comprises of seeing how long the evaluated individual takes to run a 2.400m distance. (Cooper, 1982).

4. Strength Test: The isometric strength was measured. Test procedures: The test is conducted in a metal or wood bar. It should be sufficiently high to allow the subject to be hanging with a total extension of the upper and lower limbs. The grip should be with wrist pronation. The subject should elevate the body until the chin passes the bar or levels with it; the arms should be inflected close to the trunk and the chest should be as close to the bar as possible. The subject should stay in this position as long as possible. (AAHPER, 1976).

The WHOQOL-BREF instrument comprises of 26 items and takes into account the last fifteen days to verify the individual's perception of his/her Quality of Life during that period. Two items refer to the individual perception regarding his/her overall Quality of Life and the 24 others are subdivided into 4 domains, and they represent each one of the 24 facets included in the original instrument (WHOQOL-100), such as: Domain I - Physical, with emphasis in the following facets: pain and discomfort, energy and fatigue, sleep and rest, mobility, daily activities, drug or treatment dependence and work capacity; Domain II - Psychological, which focuses the following facets: positive feelings, thinking, learning, memory and concentration, self-esteem, corporal image and appearance, negative feelings, spirituality, religion and personal beliefs; Domain III - Social Relationship approaching to facets: personal relationships, social support, sexual activity; Domain IV - Environment, with the following facets: physical safety and protection, home atmosphere, financial resources, social and health care: readiness and quality, opportunity to acquire new information and skills, opportunities and participation in leisure activities, and physical environment (pollution, noise, traffic, climate, and transport) (FLECK et al., 2000).

Statistical analysis

To analyze the questionnaire on QL the criteria proposed by the Australian team of WHOQOL were used, considering that such criteria provide the possibility of a clear and appropriate demonstration of all the phases of the complete process and also an accurate interpretation of the results. The intrinsic validity of the answers was assessed through Cronbach coefficient of reliability, with á=0,78 for the two groups.

Kendall's correlation coefficient test was used to correlate the physical fitness with the physical domain of WHOQOL-Bref intra group. To do so it was necessary to classify the physical aptitude test results and to transform them into an ordinal scale from 1 to 5, for instance: 1=very weak, 2=weak, 3=average, 4=good and 5=excellent.

The IMC variable classification was based on the OMS (1995) recommendations, the % of fat, on Lohman's (1992),

the variable aptitude cardio respiratory on Jogging's in Cooper (1982) and the upper limbs static strength variable on Bemben et al. (1992) recommendations.

The Mann-Whitney no-parametric test was carried out to analyze the differences between the two groups' answers to the questionnaire WHOQOL-Bref. The statistical software selected was SPSS version 11.5 (SPSS Inc.).

RESULTS

The descriptive characterization of the surveyed individuals is expressed on average and deviation pattern (Table 1). The QL results for the two groups were subdivided in their 4 domains and can be observed in the Table 2. The individuals serving the army in Ponta Grossa city obtained more satisfactory results in all domains when compared with the ones settled in Lapa city Army Division.

Table 1 - Sample variables characterization with values expressed on average and deviation pattern.

Variables	G1* (n=28)	G2** (n=37)
Age	20,8±2,3	18,9±0,4
Stature (m)	1,79±0,07	1,74±0,07
Mass (kg)	78,3±12,4	69,1±8,3
BMI (kg/m^2)	24,6±3,8	22,7±2,3
Tríceps (mm)	11,2±4,4	9,8±3,0
Suprailiac (mm)	17,5±7,6	10,8±4,8
Abdominal (mm)	18,1±6,8	11,9±4,5
Fat %	16,6±4,5	11,9±4,3
Strength	27,3±12,8	24,9±11,3
VO2 $_{máx}$ ml(kg.min)$^{-1}$	43,8±6,1	45,2±3,1

*Individuals designated in Ponta Grossa-PR city

**Individuals designated in Lapa-PR city

Table 2 - WHOQOL domains Results with values expressed on average and deviation pattern.

Quality of Life	G1 (n=28) %	G2 (n=37) %
Domain I – Physical	70,3±13,6	68,3±11,5
Domain II – Psychological	70,4±10,8	68,9±14,7
Domain III – Social Relationship	74,1±12,3	70,5±13,8
Domain IV – Environment	54,8±14,9	51,2±12,6

Kendall's correlation coefficient showed a relation between the Physical Domain and the % variables of fat and strength for G1, and between the Physical Domain and the variables IMC, strength and $VO2_{máx}$ for G2 (Table 3).

The Mann-Whitney test analysis showed a significant difference (p=0,049) in quality of life between the two groups, with G1 surpassing G2.

Table 3 - Kendall's correlation coefficient intra group between the Physical Domain and the % variables of fat, IMC, strength and $VO2_{máx}$.

Physical Domain	Fat %	BMI	Strength	$VO2_{máx}$
G1	0,179*	0,029	0,685**	0,029
G2	0,001	0,231**	0,841**	0,199**

* p< 0,05

** p< 0,01

DISCUSSION

The environmental domain showed the lowest percentile values, both for G1 and for G2, being therefore the main vulnerable point in QL of the studied group. In a study developed by Siviero (2003), with 33 post-heart-attack patients of about 59 years old and below, similar results were obtained with the environmental domain presenting inferior values to the other domains.

This tendency to low values for the environmental domain is alarming, because it is directly connected to the lack of investment in municipal, state, and federal public policies. Recently, some Brazilian municipal districts (for instance, Curitiba-PR, Chopinzinho-PR, Vinhedo-SP), looking for improving the population's life condition, have implemented programs in order to expand services in several areas, such as: basic sanitation, education, medical aid, work environment and healthy leisure activities. (VILARTA, 2004; OPAS, Sd).

The physical domain results were satisfactory for both groups. Such a conclusion was already expected regarding the fact that the two surveyed communities are used to practicing daily physical activities.

A study carried out by Brown et al. (2004), upon 175.850 men and women at the age of 18 or above showed that the participation in physical activities of moderate or vigorous level is associated with high levels of QL related to health in adults, and as the frequency of physical activity increases during the week, the better is the QL.

According to Nahas (2003), physical activity and physical fitness have been associated to well-being in people's health and quality of life of all ages, and mostly in middle-aged people and in the elderly, when the potential risks of the inactivity are materialized, causing early death and wasting many years of useful life.

Kendall's correlation coefficient results showed that there is a relation between the physical domain, for G1 and G2 respectively, between the variables, % of fat and strength; and IMC, strength and VO2max. Although we cannot establish a relation between cause and effect, statistical evidence points out a great possibility of interference of the physical activity in the results of the WHOQOL-Bref physical domain.

A Study developed by Wendel-Vos et al. (2004), upon 2.129 male and female individuals within the age group of 20 and 59, hasn't drawn any conclusion on the possibility of clarifying a relation between cause and effect in the association between the physical activity and the QL related to health. However, the authors recommend that new studies, mainly longitudinal and intervening with the population in general, should be carried out to validate the results found so far.

The correlation found between the physical domain and the % of fat (for G1) and IMC (for G2) demonstrates that probably obese individuals and/or with high percentile of corporal fat can have his/her QL reduced. In the same manner a correlation was obtained between the physical domain and the variable strength (for G1 and G2) and cardio respiratory aptitude (for G2), pointing out that individuals with satisfactory levels of strength and cardio respiratory aptitude possibly enjoy a better QL, when compared with individuals that possess lower levels of those physical characteristics.

Fontaine et al. (1999) accomplished a research upon individuals between the ages of 21 and 45, using the SF-36 questionnaire, and they demonstrated that the weight loss in lightly to moderate overweight individuals can be associated to an improvement in QL related to health. The authors also suggest that such a weight loss promotes a great improvement in their health condition, self-image, and in the enhancement of the abilities in daily performance.

A Research carried out by Kaelin et al. (2001) investigated the effectiveness of a program of interval and strength training and its relationship with the improvement of QL, in 50 individuals of both sexes that were in the phase of lung rehabilitation. The authors concluded that the combination of interval and strength exercises provided an increase in functional

capacity, as well as an improvement in the QL of the studied group.

A study developed by Kao et al. (2005), aimed at examining the effectiveness of WHOQOL-Bref in the life span prediction of 689 males over 65 years old in a 2-year period. The authors inferred that WHOQOL-Bref was capable to predict the individuals' life span studied within a period of 2 years, and the physical domain was considered the best life span predictor when compared with other domains of WHOQOL-Bref.

This difference suggests the subjectivity and complexity of the QL, because the two analyzed groups present several similarities, such as: gender, age group and type of work. However, due to environmental differences since the two groups serve in different cities and due to individual differences, the individuals of G1 possess a better QL when compared with the individuals of G2.

In a study carried out by Saupe et al. (2004), the QL of academics attending six Nursing Degree courses was compared. Three of the courses were linked to Federal Public Universities and three others to state Universities, all located in the South of Brazil. The authors didn't use inductive statistics to analyze the differences of QL between Universities. However, according to the referred study remarkable differences can be observed through the descriptive analysis.

Comparative studies of QV between different groups of people are still scarce all over the world and mainly in Brazil. The same happens with researches that look for to associating QL with other factors, such as, physical fitness, health condition and mental health, among others. Therefore broader investigations are necessary concerning the themes related to health and QL, consequently helping the development of specific knowledge for the scientific community and population in general.

CONCLUSION

WHOQOL-Bref questionnaire is a very recent one, and its use is still limited in researches with the Brazilian population, hindering comparisons between different studies concerning the quality of life of different groups and/or populations. Therefore, future research making use of this instrument is necessary so that a map of the QL of the desired group can be create, thus having the possibility to intervene in the most vulnerable domains.

Taking into account the limitations of this study, it can be stated that the physical aptitude analyzed may present a relationship with the physical domain of WHOQOL, and consequently with QL in general, therefore satisfactory levels of strength, and cardio respiratory aptitude, and a healthy corporal composition are important factors for obtaining the wanted QL.

REFERENCES

AAHPER. AAHPER Youth Fitness Test Manual. Washington, DC: American Alliance for Health, Physical Education, and recreation, 1976.

BEMBEN, M. et al. Reliability of isometric force-time curve parameters for men aged 20 to 79 years. Journal of applied sport science research, 6: 158-164, 1992.

BROWN, D. W. et al. Associations between physical activity dose and health-related quality of life. Med Sci Sports Exercise, 36(5): 890-896, 2004.

COOPER, K. H. **O programa aeróbico para o bem estar total**. Rio de Janeiro: Nórdica, 1982.

FLECK, M. P. A. et al. Aplicação da Versão em Português do Instrumento Abreviado de Avaliação da Qualidade de Vida "WHOQOL-bref". Revista de Saúde Pública, 34 (2): 178-183, 2000.

FONTAINE, K. R. et al. Impact of weight loss on health-related quality of life. Quality of Life Research, 8: 275-277, 1999.

GUEDES, D. P. **Composição Corporal: Princípios, Técnicas e Aplicações**. Londrina: Associação dos Professores de Educação Física, 1994.

KAELIN, M. E. et al. Physical fitness and quality of life outcomes in a pulmonary rehabilitation program utilizing symptom limited interval training and resistance training. Journal of Exercise Physiologists, 4(3): 30-37, 2001.

KAO, S. et al. WHOQOL-Bref as predictors of mortality: A two-year follow-up study at veteran homes. Quality of Life Research, 14: 1443-1454, 2005.

LOHMAN, T. G.; ROCHE, A. F.; MARTORELL, R. Anthropometrics Standardization Reference Manual. Champaign: Human Kinetics Books, 1988.

LOHMAN, T. Advance in body composition assessment. Current in exercise science series. Monograpf n° 3. Champaign, IL: Human Kinetics, 1992.

NAHAS, M. V. **Atividade Física, Saúde e Qualidade de Vida: conceitos e sugestões para um estilo de vida ativo**. 3 ed. Londrina: Midiograf, 2003.

OMS. Organização Pan-Americana da Saúde. Municípios e Comunidades Saudáveis. Guia dos prefeitos para promover qualidade de vida. Sd.

SAUPE, R. et al. Qualidade de vida dos acadêmicos de enfermagem. Ver. Lationo-Am. Enfermagem, 12(4): 636-642.

SEIDL, E. M. F.; ZANNON, C. M. L. C. Qualidade de vida e saúde: aspectos conceituais e metodológicos. Cadernos de Saúde Pública, 20(2): 580-588, 2004.

SIRI, W. Body composition from fluid paces and density: analysis of methods. In.: Brozek, J.; Henschel, A. **Techniquies for measuring body composition**. Washington, National Academy of Science, 1961.

SIVIERO, L. M. P. S. Saúde mental e qualidade de vida de infartados. 2003. Tese (Doutorado em Enfermagem) Escola de Enfermagem de Ribeirão Preto, Universidade de São Paulo, Ribeirão Preto.

The WHOQOL Group. The World Health Organization quality of life assessment (WHOQOL): position paper from the World Health Organization. Soc Sci Med, 1995.

VILARTA, R. (Org.). Qualidade de vida e políticas públicas: saúde, lazer e atividade física. Campinas: IPES Editorial, 2004.

WENDEL-VOS, G. C. W. et al. Leisure time physical activity and health-related quality of life: Cross-sectional and longitudinal associations. Quality of Life Research, 13: 667-677, 2004.

WHO Expert Committee on Physical Status: The use and interpretation of anthropometry physical status. Geneva: World Health Organization; 1995. (WHO Technical Report Series, vol 854).

Teresa Maria Bianchini de Quadros
Rua: Barão do Rio Branco, 1124
Bairro: Centro
CEP: 83.750-000
Cidade: Lapa
Estado: Paraná
E-mail: tetemb@gmail.com
Telefone: (41) 3622-5872
Instituição: Universidade Federal do Paraná UFPR

QUALITY OF LIFE AND PHYSICAL FITNESS OF INDIVIDUALS IN THE BRAZILIAN ARMY
Summary

Nowadays Quality of Life (QL) has been the focus of several researches and now more than ever the professionals in the Healthcare area worry about it. This study aims at analyzing the QL of individuals from two Brazilian Army Barracks, as well as to establish a relation between QL and physical fitness concerning health. The sample was composed of 65 male individuals serving the Army Barracks settled in Lapa-Pr (n=37) and Ponta Grossa-Pr (n=28) cities and the average age ranging from 18 and 28. The QL was measured through the (WHOQOL-Bref) and the corporal composition, the cardio respiratory aptitude and the upper limbs strength were considered in the evaluation of physical fitness. The criteria proposed by the Australian team of WHOQOL were used in the analysis of the questionnaire on QL. Kendall's correlation coefficient test was used to correlate the physical fitness with the physical domain of WHOQOL-Bref intra group. The Mann-Whitney test was administered to analyze the differences in answers to the WHOQOL-Bref questionnaire between the two groups. The general results of QL were satisfactory for both groups, and the environmental domain obtained the lowest percentage values in the two groups. Kendall's correlation coefficient test showed a relation between the Physical Domain and the variables % of fat and strength for Ponta Grossa-Pr (n=28) city sample, and between the Physical Domain and the variables IMC, strength and Vo2max for Lapa-Pr city sample. The Mann-Whitney test analysis showed a significant difference (p=0,049) between the quality of life of the two groups, with the individuals from Ponta Grossa-Pr city surpassing the individuals from Lapa-Pr city. Taking into account the limitations of this study, it can be stated that the physical fitness analyzed may present some relation with the WHOQOL physical domain and consequently with the overall QL.

Key words: Quality of Life, Fitness Physical, WHOQOL-Bref.

QUALITÉ DE VIE ET APTITUDES PHYSIQUES D'INDIVIDUS DE L'ARMÉE BRÉSILIENNE
Résumé

Actuellement la Qualité de vie (QV) vient en étant le but de plusieurs recherches et de plus en plus, elle préocupe le profissionels de la santé. Cet étude objetive analyser et refléchir sur la QV d'individus appartenant deux quartiers de l'armée brésilienne, aussi qu' établir des relations entre la QV et les aptitudes physiques qui ont des relations avec la santé. L'échantillon a été composé par 65 individus du sexe masculin appartenant à l'armée du quartier de la ville de la Lapa-Pr (n=37) et Ponta Grossa-Pr (n=28), sur l'âge amostral en variant de 18-28 ans. La QV a été mensurée à travers du WHOQOL-Bref et les aptitudes physiques évaluées ont été la composition corporel, l'aptitude cardiorrespiratória et la force de membros supérieurs. Pour l'analyse du questionnaire sur la QV, on a utilisé les critériuns proposés par l'équipe australienne do WHOQOL. On a utilisé le test du coefficient de concordance de *Kendall* pour établir une relation entre les aptitudes physiques avec le domaine physique du WHOQOL-Bref intragroupe. Pour analyser les differences des réponses du questionnaire WHOQOL-Bref entre les groupes a été realisé le test de *Mann-Whitney*. Les résultats générals de la QV ont été satisfactoires pour les deux groupes, en étant le domaine environnemental a obtenu les mineurs valeurs pourcentuels pour les deux groupes. Le coeficient de concordance de *Kendall* a indiqué correlation entre le Domaine physique et les alterations % de graisse et de force pour l'échantillon de ville Ponta Grossa-Pr, et entre le Domaine Physique et les altérations IMC, la force et Vo2max pour l'échantillon de la ville de la Lapa-Pr. L'analyse du test *Mann-Whitney* a indiqué la difference significative (p=0,049) entre la qualité de vie de deux groupes, avec le groupe d'individus de la ville de Ponta Grossa-Pr en surpassant les individus de la ville de la Lapa-Pr. Tiens compte les limitations de cet étude, on peut afirmer que les aptitudes physiques analysées probablement présentent la rélation avec le domaine physique du WHOQOL, en conséquence avec la QV en général.

Paroles-clef: Qualité de Vie, Aptitudes Physiques, WHOQOL-Bref

CALIDAD DE VIDA Y CAPACIDADES DE INDIVIDUOS DEL EJÉRCITO BRASILE
Resumen

Actualmente la Calidad de Vida (CV) es objeto de diversas pesquisas y, cada vez más, preocupa los profesionales del campo de la salud. Este estudio tiene como objeto analizar y reflexionar sobre la CV de individuos que pertenecen a dos cuarteles del ejército brasileño y, tambien, establecer relaciones entre a CV y capacidades relacionadas la salud. La prueba fué relizada con 65 individuos del sexo masculino que pertenecen al ejército del cuartel de la ciudad Lapa-Pr (n=37) y Ponta Grossa-Pr (n=28), con edad que oscila entre los 18-28 años.

La CV fué medida por medio del WHOQOL-Bref y las capacidades físicas examinadas fueron, la composición corporal, la capacidad cardio-respiratoria y la fuerza de los miembros superiores. Para el análisis del cuestionario sobre CV se utilizzaron los criterios presupuestos por el equipo australiana del WHOQOL. Se utilizó el test del coeficiente de concordancia de Kendall para correlacionar las capacidades físicas con el dominio físico del WHOQOL-Bref intre frupo. Para analizar las diferencias de las respuestas del cuestionario WHOQOL-Bref entre los grupos fué realizado el test de Mann-Whitney. Los resultados generales de la CV fueron satisfactorios para los dos grupos, siendo que el dominio ambiental obtuvo los menores valores por ciento para los dos grupos. El coeficiente de concordancia de Kendall indicó correlación entre el Dominio Físico y las variables % de gordura y fuerza para la prueba de la ciudad Ponta Grossa-Pr, y entre el Dominio Físico y las variables IMC, fuerza y Vo2max para la prueba de la ciudad de Lapa-Pr. El análisis del test Mann-Whitney indicó diferencia significativa (p=0,049) entre la calidad de vida de los dos grupos, con el grupo de individuos de la ciudad de Ponta Grossa-Pr superando los individuos de la ciudad Lapa-Pr. Tomando en consideración las limitaciones de este estudio, se puede afirmar que las capacidades físicas analizadas presentan posiblemente relación con el dominio físico del WHOQOL, y consecuentemente con La CV en general.

Palavras-chave: Calidad de Vida, Capacidades, WHOQOL-Bref.

QUALIDADE DE VIDA E APTIDÃO FÍSICA DE INDIVÍDUOS DO EXÉRCITO BRASILEIRO
Resumo

Atualmente a Qualidade de Vida (QV) vem sendo alvo de diversas pesquisas e, cada vez mais, preocupa os profissionais da área da saúde. Este estudo objetiva analisar a QV de indivíduos pertencentes a dois quartéis do exército brasileiro, bem como estabelecer relações entre a QV e aptidões físicas relacionadas à saúde. A amostra foi composta por 65 indivíduos do sexo masculino pertencentes ao exército do quartel da cidade da Lapa-Pr (n=37) e Ponta Grossa-Pr (n=28), com a idade amostral variando de 18-28 anos. A QV foi mensurada através do WHOQOL-Bref e as aptidões físicas avaliadas foram, a composição corporal, a aptidão cardiorrespiratória e a força de membros superiores. Para a análise do questionário sobre QV utilizou-se os critérios propostos pela equipe australiana do WHOQOL e o teste do coeficiente de concordância de *Kendall* para correlacionar as aptidões físicas com o domínio físico do WHOQOL-Bref intragrupo. Para analisar as diferenças das respostas do questionário WHOQOL-Bref entre os grupos foi realizado o teste de *Mann-Whitney*. Os resultados gerais da QV foram satisfatórios para os dois grupos, sendo que o domínio ambiental obteve os menores valores percentuais para os dois grupos. O coeficiente de concordância de *Kendall* indicou correlação entre o Domínio Físico e as variáveis % de gordura e força para a amostra da cidade de Ponta Grossa-Pr, e entre o Domínio Físico e as variáveis IMC, força e Vo2max para a amostra da cidade da Lapa-Pr. A análise do teste *Mann-Whitney* indicou diferença significativa (p=0,049) entre a qualidade de vida dos dois grupos, com o grupo de indivíduos da cidade de Ponta Grossa-Pr superando os indivíduos da cidade da Lapa-Pr. Levando-se em consideração as limitações deste estudo, pode-se afirmar que as aptidões físicas analisadas possivelmente apresentam relação com o domínio físico do WHOQOL, e consequentemente com a QV em geral.

Palavras-chave: Qualidade de Vida, Aptidão Física, WHOQOL-Bref.