177 - THE PHYSICAL HEALTH DOMAIN OF WHOQOL-100 AND SELF-ESTEEM: A SELF PERCEPTION STUDY OF ADULTS IN VALE DO SINOS, SOUTHERN BRAZIL.

DANIEL FACCHINI, PAULO GOMES DE OLIVEIRA NETO,
WOLNEY HASS JUNIOR, JOÃO CARLOS JACCOTTET PICCOLI,
GERALDINE ALVES DOS SANTOS, ANDRÉA CRISTINA BULHÕES.
Centro Universitário Feevale
Novo Hamburgo, RS, Brazil
mrknifey@gmail.com

INTRODUCTION

Self-esteem is a feeling that develops along life as a function of social approval, self-efficacy and competency resulting from the perception of personal action in the environment. (FRANKS; MAROLLA, 1976). Social concerns about this topic are confirmed by the large number of current self-help publications in the area of self-perception.

In agreement with a cognitive and social approach, personal and environmental factors determine behavior. Self-esteem is perceived as a personal characteristic and, consequently, directly associated with final behavioral results (CARVALHO et al. 2005). Therefore, self-esteem greatly affects all social relationships.

Health concepts that follow a bio-psychosocial model, in which biological, psychological and social factors interact in the study of diseases (ENGEL, 1977), created a paradigm in which health is not defined as absence of disease (BOORSE, 1977). Six decades ago, the World Health Organization (WHO) defined health as “a state of complete physical, mental and social well being and not merely the absence of disease or infirmity.” Such definition underlines the importance of social and mental factors.

Health status is, therefore, determined by inseparable influences. In a holistic approach, people, seen as complex beings living in a social environment, have concerns and desires that are influenced by biological and psychological factors.

This study defines physical health as a state of physical well being and the absence of physical symptoms such as pain, discomfort, lack of energy or sleep disorders.

Physical health evaluations are not less important in any aspect. The attention to symptoms is fundamental, and the evaluation of physical health is indispensable. In this context, the stress induced by the environment may make people susceptible to diseases (COHEN; TYRRELL; SMITH, 1991).

Health is directly associated with quality of life (HIRAYAMA et al., 2008). Although difficult to define, health refers to “individuals' perceptions of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns” (THE WHOQOL GROUP, 1995). Physical disability may lead to eventual distancing from social activities or, when more severe, to difficulties or limitations in performing activities of daily living. In both cases, quality of life is severely affected.

The different terms used to discuss quality of life (QoL) are intricately associated. QoL has multiple dimensions and may be affected by changes in physical health or self-esteem, for example. However, it is impossible to use only one variable to predict the extension of its effect on overall quality of life because human activity is extremely complex, and a deficiency in one domain may be compensated by improvement in another.

A generalist approach may be unable to identify whether changes in self-esteem affect the perception of an individual's insertion in the environment, or if the contrary is true. However, there is a clear association between self-esteem and social insertion (STAGER; BURKE, 1982 in CARVALHO et al., 2005). Similarly, physical health is associated with social insertion, but no causal relationship has been established. Low levels of social engagement may be indicative of hidden health problems (BENNETT, 2002).

Of the three main sources of self-esteem, family experience, performance feedback and social comparisons (MICHENER; DELAMATER; MYERS, 2005), the third may be associated with physical health. As mentioned earlier, if social activities are associated with physical health, the effect that physical changes mediated by social interactions have on self-esteem may be confirmed.

The analysis of associations between our study variables may provide a better understanding of their complex interactions and consolidate a multiple dimensional approach to healthcare. Our purpose is to find out whether measures to increase self-esteem have positive results in the treatment of physical diseases or vice versa.

Therefore, this study evaluated the association between physical health and self-esteem to understand whether changes in the levels of energy, pain and fatigue are associated with self-esteem.

METHODS

This cross-sectional descriptive study enrolled a convenience sample of 997 individuals living in Vale do Sinos, southern Brazil. Participants were men and women aged 18 to 80 years that were contacted personally, by phone or by e-mail to schedule evaluations. All participants read and signed an informed consent term. The instruments were applied by researchers and undergraduate research trainees.

The World Health Organization Quality of Life Questionnaire (WHOQOL-100) and the Rosenberg self-esteem scale were used. The first is a questionnaire with 100 closed questions to be answered using a Likert-like scale. According to the multiple dimensional concept of quality of life, this instrument evaluates six different domains: physical health, psychological state, level of independence, social relationships, environment, and spirituality/religion/personal beliefs. Each domain is divided into facets, at a total of 24 facets, in addition to four general questions. This study used only the first domain of the questionnaire, the physical domain. This domain is divided into three facets: pain and discomfort; energy and fatigue; and sleep and rest. There are four questions for each facet.

The second instrument was the Rosenberg self-esteem scale, published in 1965 as a tool to measure this important component of self-concept (ROSENBERG, 1965). It is made up of 10 closed questions and responses are given using a Likert-like scale.

The Spearman correlation coefficient (ñ - rho) was used for data analysis, and the level of significance was set at p=0.05. The Statistical Package for the Social Sciences (SPSS 15.0) was used for statistical analysis of collected data.

RESULTS AND DISCUSSION

Results showed that there was a statistically significant correlation between all the items that referred to self-esteem

when compared to the physical health domain of WHOQOL-100 (p=0.01).

Pain and discomfort had the weakest correlation with self-esteem, and energy and fatigue, the strongest.

Table 1 Distribution of Spearman correlation coefficient ( ) for WHOQOL-100 facet 1, questions 1, 2, 3 and 4, and the Rosenberg self-esteem scale (n=997).

	F1.1	F1.2	F1.3	F1.4
Self-esteem 1	0.058	-0.007	0.032	0.025
Self-esteem 2	0.046	0.005	0.062	0.031
Self-esteem 3	-0.148(**)	0.013	-0.095(**)	-0.092(**)
Self-esteem 4	0.086(**)	-0.046	0.051	0.001
Self-esteem 5	-0.180(**)	0.023	-0.038	-0.017
Self-esteem 6	0.070(*)	-0.009	0.053	0.069(*)
Self-esteem 7	0.140(**)	0.039	0.145(**)	0.104(**)
Self-esteem 8	-0.061	-0.039	-0.107(**)	-0.084(**)
Self-esteem 9	-0.157(**)	-0.023	-0.113(**)	-0.057
Self-esteem 10	-0.142(**)	-0.01	-0.084(**)	-0.023

*p=0.05 **p=0.01

Results showed that people that often felt physical pain (F1.1) agreed that they did not have much to be proud of (self-esteem 5) (ñ=-0.180). This finding indicates that pain affects fundamental personal feelings or even cognitive functions (KUHAJDA; THORN; KLINGER, 1998). Table 1 shows this correlation and those that referred to the “pain and discomfort” facet.

A great variation between positive and negative correlations is seen in the tables. This may be explained by the fact that both instruments had some questions with reversed answers, in which the first option (nothing/never/strongly agree), rather than the last (extremely/always/strongly disagree), was the ideal answer.

Table 2 shows that in the analysis of energy and fatigue (WHOQOL-100, facet 2), participants that were satisfied with their level of energy (F2.3) were also satisfied with themselves (Self-esteem 7) (ñ=?0.309). Social comparisons are one of the sources of self-esteem (MICHENER; DELAMATER; MYERS, 2005), and having energy for the activities of daily living may bring personal satisfaction because most social interactions demand a certain level of energy.

Table 2 Distribution of Spearman correlation coefficient ( ) for WHOQOL-100 facet 2, questions 1, 2, 3 and 4, and the Rosenberg self-esteem scale (n=997).

	F2.1	F2.2	F2.3	F2.4
Self-esteem 1	-0.118(**)	-0.049	-0.117(**)	-0.039
Self-esteem 2	-0.138(**)	-0.081(*)	-0.163(**)	-0.098(**)
Self-esteem 3	0.297(**)	0.156(**)	0.239(**)	0.149(**)
Self-esteem 4	-0.162(**)	-0.084(**)	-0.184(**)	-0.065(*)
Self-esteem 5	0.262(**)	0.109(**)	0.199(**)	0.075(*)
Self-esteem 6	-0.220(**)	-0.128(**)	-0.277(**)	-0.176(**)
Self-esteem 7	-0.250(**)	-0.151(**)	-0.309(**)	-0.221(**)
Self-esteem 8	0.171(**)	0.066(*)	0.139(**)	0.095(**)
Self-esteem 9	0.239(**)	0.147(**)	0.269(**)	0.158(**)
Self-esteem 10	0.238(**)	0.127(**)	0.235(**)	0.136(**)

* p=0.05 **p=0.01

That decrease energy and physical functioning, such as anemia, lead to a decreased perception of well being (SEMBA et al., 2005). To improve quality of life, strategies to increase physical energy are indispensable when energy is low.

Table 3 shows the correlations between WHOQOL-100 facet 3, which refers to sleep and rest, and the Rosenberg self-esteem scale. Correlations are stronger than those for pain and discomfort, but weaker than those for energy and fatigue.

Table 3 Distribution of Spearman correlation coefficient (ñ)

Table 3 Distribution of Spearman correlation coefficient ( ) for WHOQOL-100 facet 3, questions 1, 2, 3 and 4, and the Rosenberg self-esteem scale (n=997).

	F3.1	F3.2	F3.3	F3.4
Self-esteem 1	-0.132(**)	-0.109(**)	-0.143(**)	-0.067(*)
Self-esteem 2	-0.098(**)	-0.077(*)	-0.107(**)	-0.070(*)
Self-esteem 3	0.199(**)	0.153(**)	0.207(**)	0.132(**)
Self-esteem 4	-0.145(**)	-0.093(**)	-0.136(**)	-0.058
Self-esteem 5	0.171(**)	0.134(**)	0.170(**)	0.114(**)
Self-esteem 6	-0.101(**)	-0.071(*)	-0.150(**)	-0.109(**)
Self-esteem 7	-0.175(**)	-0.121(**)	-0.182(**)	-0.130(**)
Self-esteem 8	0.122(**)	0.069(*)	0.094(**)	0.092(**)
Self-esteem 9	0.189(**)	0.156(**)	0.176(**)	0.122(**)
Self-esteem 10	0.162(**)	0.153(**)	0.166(**)	0.126(**)

*p=0.05 **p=0.01

People dissatisfied with sleep (F3.3) were also inclined to feel that they were a failure (self-esteem 3) (ñ=0.207). The interaction between the variables in Tables 2 and 3 contributed to the understanding of the impact of poor sleep quality on the levels of energy during waking hours. Sleep disorders may cause daytime sleepiness, depression, irritability, difficulties in concentration, and poor memory (SILVA, 2000, apud GANHITO, 2003). Therefore, dissatisfaction with sleep is associated with low self-esteem because it affects energy negatively.

Muller and Guimarães (2007) divided the consequences of sleep disorders into three groups of factors that affected quality of life: biological variables, such as tiredness, fatigue, memory failure, attention and concentration difficulties, hypersensitivity to sounds and light, tachycardia and mood changes; functional variables, such as absenteeism, increased risk of accidents, and relationship problems; and extensive variables, such as job loss, accident sequelae, relationship break-ups, onset and exacerbation of health problems. Attention must be drawn to the effects of these disorders on quality of life (ALVES; EJZENBERG; OKAY, 2002) particularly because their symptoms are usually underestimated by both healthcare providers and patients.

CONCLUSION

There is an association between physical health and self-esteem. Pain and discomfort, lack of energy for activities of daily living, and sleep disorders were negatively correlated with quality of life, and self-esteem was lower when these factors were present.

Because of the strong correlation between energy and self-esteem, interventions should be developed to increase energy, both by treating diseases that decrease it or by motivating people to practice physical activities, which knowingly improve quality of life.

Our results also showed that sleep disorders should be investigated because they are associated with less energy.

The three facets studied were correlated with self-esteem, which indicates that healthcare should be approached from a multiple dimension perspective. To improve quality of life, greater attention should be paid to people and not to diseases.

REFERENCES

ALVES, Rosana; EJZENBERG, Bernardo; OKAY, Yassuhiko. Revisão das desordens do sono com excessiva movimentação, insônia e sonolência na criança. **Pediatria**. São Paulo. v. 24, n. 1/2, p. 50-64, 2002. Disponível em: <http://www.pediatriasaopaulo.usp.br/upload/pdf/553.pdf >. Acesso em: 05 out. 2008.

BENNETT, Kate. Low level social engagement as a precursor of mortality among people in later life. **Age and Ageing.** v. 31, n. 3, p. 165-168, 2002.

BOORSE, Christopher. Health as a theoretical concept. **Philosophy of Science**. v. 44, n. 4, p. 542-573, 1977.

CARVALHO, Ana; CATANEO, Caroline; GALINDO, Elizângela; MALFARÁ, Carolina. Auto-conceito e imagem corporal em crianças obesas. **Paidéia**. **Cadernos de Psicologia e Educação**, v. 30, n. 15, p. 131-139, 2005.

COHEN Stanley; TYRRELL, David; SMITH, Andrew. Psychological stress and susceptibility to the common cold. **The New England Journal of Medicine**. v. 325, n. 9, p. 606612, 1991.

ENGEL, George. The need of a new medical model: a challenge for biomedicine. **Science**, v. 196, n. 4286, p. 129-136, 1977.

FRANKS, David; MAROLLA, Joseph. Efficacious action and social approval as interacting dimensions of self-esteem: a tentative formulation through construct validation. **Sociometry**. v. 39, n. 4, p. 324-341, 1976

GANHITO, Nayra Cesaro Penha. **Distúrbios do sono.** 2. ed. São Paulo: Casa do Psicólogo, 2003.

HIRAYAMA, Marcio; GOBBI, Sebastião; GOBBI, Lilian; STELLA, Florindo. Quality of life (QoL) in relation to disease severity in Brazilian Parkinson's patients as measured using the WHOQOL-BREF. **Archives of Gerontology and Geriatrics**. v. 46, n. 2, p. 147-160, 2008.

KUHAJDA, Melissa Carter; THORN, Beverly Elaine; KLINGER, Mark. The effect of pain on memory for affective words. **Annals of Behavioral Medicine,** New York, v. 20, n. 1, p. 31-35, 1998.

MICHENER, Andrew; DELAMATER, John; MYERS, Daniel. **Psicologia social.** São Paulo: Pioneira Thompson Learning, 2005.

MULLER, Mônica Rocha; GUIMARAES, Suely Sales. Impacto dos transtornos do sono sobre o funcionamento diário e a qualidade de vida. **Estudos de psicologia,** Campinas, v. 24, n. 4, p. 519-528, 2007. Disponível em: <http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0103-166X2007000400011&lng=en&nrm=iso>. Acesso em: 29 set. 2008.

ROSENBERG, Morris. **Society and the adolescent self-image**. New Jersey: Princeton University Press; 1965.

SEMBA, Richard; MARTIN, Barbara; KEMPEN, John; THORNE, Jennifer; WU, Albert. The impact of anemia on energy and physical functioning in individuals with AIDS. **Archives of Internal Medicine**. v. 165, n. 19, p. 2229-2236, 2005. Disponível em: <http://archinte.ama-assn.org/cgi/reprint/165/19/2229>. Acesso em: 24 set. 2008.

THE WHOQOL GROUP. The World Health Organization Quality of Life Assessment (WHOQOL): position paper from the world health organization. **Social Science and Medicine**. v. 41, n. 10, p. 1403-1409, 1995.

55 51 3542-3637 55 51 92980371 mrknifey@gmail.com
Rua Coronel Flores, 2361. Bairro Centro. Taquara
Rio Grande do Sul, Brazil. CEP: 95600-000

THE PHYSICAL HEALTH DOMAIN OF WHOQOL-100 AND SELF-ESTEEM: A SELF PERCEPTION STUDY OF ADULTS IN VALE DO SINOS, SOUTHERN BRAZIL.

ABSTRACT

Both physical and mental health conditions, relevant factors in the conception of quality of life, are correlated with self-esteem. This study evaluated the association between physical health and self-esteem to understand whether changes in the levels of fatigue, energy, and pain are associated with self-esteem. This cross-sectional descriptive study enrolled a convenience sample of 997 individuals living in the Vale dos Sinos, southern Brazil. Physical health was analyzed using the WHOQOL-100 physical domain, and self-esteem, the Rosenberg self-esteem scale. The Spearman correlation coefficient (p=0.05) and the SPSS 15.0 software were used for data analysis. Results showed that people that had frequent physical pain agreed that they did not have much to be proud of (ñ= -0.180). Participants that were satisfied with their level of energy were also satisfied with themselves. (ñ= -0.309). Those that were unhappy about their sleep also felt that they were failures (ñ= 0.207). The only QoL facet not associated with self-esteem was pain and discomfort. The analysis of results showed that there is an important correlation between physical health and self-esteem, and points to the importance of a multiple dimension approach to healthcare because different factors are closely interconnected in the perception of self image.

Key words: Self-esteem. Physical health. Quality of life.

LE DOMAINE PHYSIQUE DU WHOQOL-100 ET L'ESTIME DE SOI : ÉTUDE SUR L'AUTO-PERCEPTION D'INDIVIDUS VIVANT DANS LA RÉGION *VALE DO SINOS*, ÉTAT DU RIO GRANDE DO SUL, BRÉSIL.

RÉSUMÉ

La santé physique et la santé mentale sont des facteurs importants dans la conception de la qualité de vie, et l'on sait qu'elles sont liées à l'estime de soi. Cette étude a eu pour objectif de mettre en rapport les conditions de santé physique des individus et leur estime de soi, afin de voir si les modifications des niveaux d'énergie, la douleur et le repos y sont associées. Il s'agit d'une analyse descriptive, portant sur un échantillon de convenance de 997 individus de 18 à 80 ans vivant dans la région *Vale do Sinos*, État du Rio Grande do Sul, Brésil. Les questions liées à la santé somatique ont été mesurées à travers le domaine physique du WHOQOL-100, et l'estime de soi avec l'échelle d'estime de soi de Rosenberg. L'étude a utilisé le coefficient de corrélation de Spearman (p = 0,05) via la version 15.0 du programme SPSS. Les données ont montré que les personnes ressentant souvent une douleur physique ont une faible estime de soi (ñ= - 0,180) ; les individus satisfaits de leur niveau de disposition sont satisfaits d'eux-mêmes (ñ= - 0,39) ; les individus insatisfaits de leur sommeil ont une estime de soi négative (ñ= 0,207). La seule question sans aucun rapport avec l'estime de soi fut la préoccupation relative à la douleur ou à l'inconfort. L'analyse des résultats montre qu'il existe une corrélation importante entre la santé physique et l'estime de soi. Elle souligne la nécessité d'une vision multidisciplinaire en matière de santé, vu que différents facteurs sont intimement liés à la perception de l'image de soi.

Mots-clés : Estime de soi. Santé physique. Qualité de vie.

EL DOMINIO FÍSICO DEL WHOQOL-100 Y LA AUTOESTIMA: UN ESTUDIO SOBRE LA AUTOPERCEPCIÓN DE INDIVIDUOS RESIDENTES EN LA REGIÓN DEL VALLE DE RIO DOS SINOS, RIO GRANDE DO SUL, BRASIL

RESUMEN

La salud física y mental son factores relevantes en la concepción de calidad de vida. Se sabe, también, que ambas están correlacionadas con la autoestima. El objetivo de este estudio fue relacionar las condiciones de salud física de los individuos con su autoestima, a fin de entender si alteraciones en los niveles de energía, dolor y descanso están asociados a ella. Se trató de una investigación de característica descriptiva, implicando a 977 individuos entre 18 y 80 años residentes en el Valle de Rio dos Sinos (Rio Grande do Sul, Brasil) y seleccionados por conveniencia. Para acercarnos a las cuestiones referentes a la salud somática se utilizó el dominio físico (I) del WHOQOL-100. La autoestima fue medida mediante la escala de autoestima de Rosenberg. Se utilizó la prueba de correlación de Spearman (p=0,05), a través del programa SPSS versión 15.0. Los datos revelaron que las personas que sienten dolor físico con frecuencia concuerdan con la premisa de que no tienen mucho de que enorgullecerse (ñ= -0.180). También mostró que los individuos que demuestran satisfacción con su nivel de disposición también están satisfechos consigo mismos (ñ= -0.309). Ya el individuo que está insatisfecho con su sueño se considera, también, un fracasado (ñ= 0,207). La única cuestión que no presentó cualquier relación con la autoestima fue la preocupación con el dolor o incomodidad. El análisis de los resultados demuestra que hay una correlación importante entre la salud física y la autoestima y apunta hacia la importancia de la visión multidisciplinar en la atención a la salud, ya que distintos factores están íntimamente interrelacionados en la percepción de la propia imagen.

Palabras-clave: Autoestima. Salud física. Calidad de vida.

O DOMÍNIO FÍSICO DO WHOQOL-100 E A AUTO-ESTIMA: UM ESTUDO SOBRE A AUTO-PERCEPÇÃO DE INDIVÍDUOS RESIDENTES NA REGIÃO DO VALE DO SINOS, RS, BRASIL.

RESUMO

A saúde física e a mental são fatores relevantes na concepção de qualidade de vida. Sabe-se, também, que ambas estão correlacionada com a auto-estima. O objetivo deste estudo foi relacionar as condições de saúde física dos indivíduos com sua auto-estima, a fim de entender se alterações nos níveis de energia, dor e descanso estão associados a ela. Tratou-se de uma investigação de característica descritiva, envolvendo 997 indivíduos entre 18 e 80 anos residentes no Vale do Sinos (RS) e selecionados por conveniência. Para abordar as questões referentes à saúde somática foi utilizado o domínio físico (I) do WHOQOL-100. A auto-estima foi mensurada através da escala de auto-estima de Rosenberg. Utilizou-se o teste de correlação de Spearman (p=0,05), através do programa SPSS versão 15.0. Os dados revelaram que as pessoas que sentem dor física com freqüência concordam com a premissa de que não têm muito do que se orgulhar (-0.180). Também mostrou que os indivíduos que demonstram satisfação com seu nível de disposição também estão satisfeitos consigo mesmos (-0.309). Já o indivíduo que está insatisfeito com o seu sono se considera, também, um fracassado (0,207). A única questão que não apresentou qualquer relação com a auto-estima foi a preocupação com a dor ou desconforto. A análise dos resultados demonstra que existe uma correlação importante entre a saúde física e a auto-estima e aponta para a importância da visão multidisciplinar na atenção à saúde, já que diferentes fatores estão intimamente interligados na percepção da própria imagem.

Palavras-chave: Auto-estima. Saúde física. Qualidade de vida.