



QUALITY OF LIFE RELATED TO HEALTH IN WORKERS.

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ABSTRACT

Health-related quality of life (HRQOL) is considered as the level of satisfaction that a person has when making and assessment about the aspects of their life related with the effects on their health. The purpose of this paper was to identify the (HRQL) in women and men that work in the State of Mexico, through the questioner SF-36 (Short Form 36 Health Survey) which was applied to 726 people with a paying job; 441 men and 285 women; who participated voluntarily in the study. The results show that workers in general have a good state of health, but when compared by sex, there are statistically significant differences in the physical function, the emotional role, body aches and health in general. The higher scores were found to be in men, suggesting that in terms of health, men have a better bill of health than women.

KEYWORDS : Quality of life, health, workers.

Introduction.

The health related quality of life (HRQOL) evaluates the objective bill of health, of functionality and of interaction of the individual with his surroundings; as well as the subjective aspects of satisfaction for the individual and the perception of its own health. (Arostegui and Núñez Anton 2008). Likewise, the increase of mobility, competitiveness, the constant need to adapt, work relationships and globalization, influence in the professional life and have a dramatic impact in the health of the workers, sometimes even causing physical and psychic disorders (Ortega, 2006).

The change of values and lifestyle that workers are experiencing due to the impact of the financial crisis set out a complex and uncertain panorama, which creates a situation of job insecurity that is reflected in the health of the worker. In fact, work must produce satisfaction and work conditions must be encouraged so that psychological health is preserved and developed (Quintanilla, 2013). Health at work and measures to promote health can contribute to the improvement of mental health, the well being of women and men and reduce the risk of mental disorders (Gil-Monte, 2010). Health is used as a positive concept that includes physical, social and personal risks (Salanova, 2009).

Traditional approaches of health in the workplace, behavioral medicine and psychology have been challenged by new economic and social contexts in the search of new perspectives of positive organizational behavior, supporting the possibilities of a dignified job and overall wellbeing (ILO, 2006). Health is recognized as an achievement that involves a balance between physical, mental and social wellbeing, this balance being the optimum state of health (Taylor, 2007). Health is a state-process that is reached when there is biological, psychological and social-environmental harmony.

(Labiano, 2010). It is a state of physical and psychological wellbeing manifested in the ability to perform physical activities and be physically fit (Morrison and Bennett, 2008).

The health related quality of life (HRQOL) is a parameter in the measurement of health outcomes, (Jenkinson, Coulter and Wright, 1993; Zuñiga, Carillo-Jimenez, Fos, Gandek and Medina Romero (1999); Arostegui y Nuñez Antón, 2008; Lizan Tudela, 2009; Romero-Márquez y Romero Zepeda, 2010; Urzúa, 2010) have managed to capture the attention of these researchers who have tried to respond to the need of including in health assessments the perception of users regarding their well being. (Schwartzmann, 2003). The HRQOL is measured by means of physical function, the psychological state of social interaction and physical symptoms (Zuñiga et al, 1999).

The concept HRQOL or health perceived was developed in the 90's and integrates those aspects of life directly related with the physical and mental function and the state of wellbeing (Guyat, Fenny and Patrick 1993; Arostegui y Nuñez Anton, 2008). This concept has been used in the evaluation of applicable treatments of chronic illnesses and cancer, it has also been used to evaluate the health services, optimize resources and identify the health area necessities of the population (Ortiz y Pueyredón, 2000); Additionally, it has been used to monitor the population's health (Alonso, 2000) and to compare and evaluate different variations of health status (Tuesca, 2005).

The HRQOL is the satisfaction of an individual with the physical social and psychological aspects of his life in the measures that this affect or are affected by health (Rodríguez, 1995; Trujillo, Román, Lombard, Remior Arredondo, Martínez, Jova, Revueltas y Valdivieso, 2014). It is the person's perception of the effects of a disease or the

application of a therapeutic measure on the different areas of his life and the consequences that he causes on his physical and emotional wellbeing (Romero-Márquez y Romero Zepeda, 2010). The HRQOL is the level of wellbeing derived from the evaluation that the person performs from different domains of his life considering the impact that these have on his bill of health (Urzúa, 2010).

Around the world researchs of HRQOL have used the instrument SF-36; in England it has been used on adult workers who are in working age (Jenkinson et al., 1993); in Spain, on workers of the health sector (Burgos, Ruiz, Queipo, Rescalvo, Martínez, Del Amo, and Burgos Díaz, 2012); in Cuba, on workers of the fishing industry (Rodríguez-Romero, Pita- Fernández, Pertega Díaz, and Chouza-Insua, 2013; Trujillo et al., 2014).

In Mexico there are studies from Zuñiga et al., (1999); Durán Arenas, Gallegos-Carrillo, Salinas-Escudero, and Martínez Salgado, (2004); and studies applied to manufacturing workers in Jalisco, done by Salazar-Estrada, Martínez, Torres, Aranda y López-Espinosa, (2016). The objective of this work was to identify through the SF-36 questionnaire the HRQOL in workers from the State of Mexico.

Method.

The present study has a comparative, quantitative and descriptive nature. It was performed with an international non-random sampling where 726 workers (aged between 17 and 66 years) from different companies in the State of Mexico were surveyed. Of this group, 39.2 % were women and 60.8 % were men; 44% of the group were married; 36.7% were single; 14.2% live in common-law; 1.5 % are widows/separated/divorced; 2.7 %. In terms of the schooling level, 32.9% has a bachelors degree, 24.7% middle school level, 21.9% technician degree, 14% high school level, 4.5% post-graduate degree and 2.1% elementary school level. In terms of the level of responsibility at work: 57.1% has an operations level, 32.3% medium management level and 10.5% has an executive level.

In terms of working status, 79.2% has secure employment, 13.8% temporary work, 2.3% contract based work and 4.7% are self-employed. The sample group works approximately between 4 and 16 hours a day, although the majority works between 8 and 12 hours a day. 3.8% abstained from identifying the number of hours worked daily.

Instruments

The health Questionnaire SF-36 was applied, version 1.1. (Zuñiga et al., 1999) to a group of 726 workers. This Questionnaire SF-36 Short Form 36 Health Survey, SF-36 was developed in early 90's in USA, for use in the study of medical results Medical Outcome Study-MOS, by Ware and Sherbourne (Alonso, Prieto and Anton 1995; Ware, 2000). It was translated and adapted to be used internationally in the International Quality of Life Assessment (IQOLA) Project (Ware, Keller, Gandek, Brazier, Sullivan, 1995). It is important to say that in Mexico, there were made studies of validity and reliability with the purpose to establish the rules for its use in generic and specific populations (Zuñiga, et al, 1999; Duran-Arenas, et al., 2004).

For the CVRS measurement, the Health Survey SF-36 has been applied, which measures aspects of CVRS in adult populations older than 16 years old (Zuñiga et al., 1999). La SF-36 is a generic scale that gives a health level profile and it is applicable to patients as much as to the general population; it has been used in generic and specific populations, comparing the relative effects of illnesses, differentiating health benefits produced by a wide range of different treatments and assessing patients at an individual level (Jenkinson et al., 1993; Ware, 2000).

Nowadays SF-36 is used as a general health measure, with this instrument, it is possible to compare results between studies and different populations in the world; which is relevant at a clinic, economic and social level (Ware, 2000). The eight dimensions or health scales that it evaluates are: physical functioning, role

limitations due to physical health, role limitations due to emotional problems, energy/fatigue, emotional wellbeing, social functioning, pain and general health that focuses its content in the functional state and emotional wellbeing. SF-36 form allows for the multi-dimensional assessment of the concept of health and includes aspects of disability, discomfort and dissatisfaction, as components of quality of life related to health (Zuñiga et al., 1999; Vilagut et al., 2005).

The functional state is represented by the dimensions: Physical functioning (10 items), Social functioning (2 items), Role functioning/physical (4 items) Role functioning/emotional (3 items), emotional wellbeing includes the dimensions: emotional wellbeing (5 items), energy/fatigue (4 items), pain (2 items). Finally, the general health assessment includes the dimension of general health perception (5 items) and the health change in the time (1 item), remarking that this last aspect does not make part of the final scoring. Similarly Rand Health (2016) states and describes the instrument assessment criteria.

On the other hand, Hays, Sherbourne and Mazel (1994) describe the following dimensions to the health state assessment: Physical Functioning: the degree in which lack of health limits physical activities of daily life, such as personal care, walking, going upstairs, hold or carry loads and doing medium or intense efforts. Physical Role: degree in which lack of health interferes in work and other daily activities having as consequence a lower performance or limiting the type of activities that can be done or the difficulty of such. Physical Pain: measure of intensity of the suffered pain and its effect on the usual work and daily activities. General Health: personal appraisal of the health state, which includes the actual state, the possible future states and the resistance to getting sick.

Likewise, Vitality is described as: the general feeling of energy and vitality facing tiredness and discouragement. The Social Functioning is: the degree in which the physical or emotional problems and derivatives of the lack of health interfere in social and daily life. Emotional Role is defined as: the degree in which the emotional problems affect work and other normal activities; considering the cutback from the given time, the decrease of performance along with the decrease of effort at work. And finally, Mental Health is: the appraisal of general mental health, considering depression, anxiety, self-control and general wellbeing.

Process:

The objective of the investigation was exposed in a meeting with enterprises that belong to the Mexican social insurance system, all the enterprises and their workers were invited to participate in the project. Out of all, seven enterprises decided to be part of the investigation. Before the implementation of the instrument the workers were informed that their participation was voluntary and anonymous. The surveys were carried out inside the installations of the respective enterprises. All participants gave their consent to participate in the study and provided their social demographic information. Additionally, more surveys were provided to workers from other enterprises, who decided to participate individually in the study.

Statistical analysis.

The data processing was performed with the use of the statistical package SPSS21. Frequencies and percentages regarding social-demographic aspects were obtained. Based on the SF-36, mediums and standard deviations were obtained; along with the p-value and the effected t-student test.

Results

Table 1 shows the eight dimensions that the HRQOL measures and emphasizes that all dimensions are above the mean, which indicates that the bill of health of the workers is good.

Factors	Mean	Standard deviation
Physical functioning	94.05	12.03
Physical Role	92.94	20.87
Emotional Role	83.38	32.01
Mental Health	59.25	8.90
Social Functioning	52.12	12.10
Vitality	51.25	10.13
Body Aches	83.59	18.97
General Health	70.97	17.74

When compared by sex, significant statistical differences were found regarding the physical functioning, the emotional role, body pain, and general health. The higher scores were found to be in men, table 2.

Table 2 Comparison of Health vs Sex.

Factors	Female		Male		t	p
	M	DE	M	DE		
1. Physical Functioning	91.74	13.40	95.54	10.81	4.210	.000
2. Physical Role	90.00	25.71	94.82	16.83	3.059	.005
3. Emotional Role	78.44	35.94	86.56	28.80	3.370	.001
3. Body Aches	80.91	20.70	85.33	17.56	1.102	.002
4. General Health	69.35	18.30	72.02	17.31	.056	.048
5. Vitality	50.98	9.85	51.42	10.31	.570	.002
6. Social Functioning	52.15	13.28	52.10	11.30	3.088	.955
7. Mental Health	58.79	9.70	59.54	8.35	1.959	.271

Discussion.

According to the HRQL, results indicate that the workers have a good bill of health. Also, statistical differences were found between men and women; the physical functioning scale was found to be the highest in men, which coincides with Zuñiga et al., (1999). These scores indicate that in the results of the SF-36 in Mexican populations, the Physical Functioning was higher for men than for women, although this does not apply in the case of Overall Health, as women were found to have lower scores.

Furthermore, significant differences were found between men and women regarding the Emotional Role hence the effect that emotional problems affect their daily routine, work and other activities. The latter coincides with Salanova (2009), who mentions health is used as a positive concept that includes physical resources along with social and personal ones. Health is understood as a state-process that is achieved when the person has biological, psychological and socio-environmental harmony (Labiano, 2010).

Regarding Body Aches, even though health is good at a general level, the differences between men and women are found to be in the degree with which the intensity of pain strikes them and its effect on their normal activities and usual work. These, lead to a reconsideration of the risks inside work that are influencing the pain. Particularly, considering that health in the workplace consists of the protection of lives and the physical wellbeing of workers, through the elimination, or control of risk inside the work environment or in the work system that workers operate (OIT, 2012).

In general, women presented a lower bill of health than men. This is due to a problem of the XXI century, and it seems to be related to the way that the social role of women has changed in the society. Without a doubt there are differences between men and women that affect the health of the individual and that have their origin in

psychosocial experiences. Men have more risky behaviors when it comes to health than women, but are less predisposed to look for help in case of an illness contrary to women. At the same time, many women are economically inactive or have jobs with a much lower salary in comparison to men, which increases their vulnerability to problems related with a low socio-economic level (Morrison et al., 2008).

These results in health coincide with the study realized by Jenkinson et al., (1993) with the SF-36 in England. This study was applied to senior adults in jobs where women in working age reported less health in all the variables of the SF-36 in comparison with men. Also coinciding with the scores of women at the seafood industry in Spain which were found to have low scores on the HRQL when compared to the average health of Spanish women and other working men in the seafood industry (Rodríguez-Romero et al., 2013).

The overall results of the present HRQL show that women have lower bills of health than men, which agrees with Morrison and Bennett (2008), who state that the relation between work and health is complex, but that it is better for the health to have a job than not to have one. In the case of women, the combination of the pressure of having a job with the demands outside of the workplace, can affect in a negative way their health. Many women have problems with the conciliation of housework and the work outside their homes, which has a negative effect on their physical and mental health.

Even though men have higher scores in mental health (Tomas, Sancho, Navarro y Melendez; 2009) important differences in terms of mental health between men and women are found. For men the evaluation of mental health state rises with the control and direction of work while for women it is positive, the professional development and the possibilities of social relationships, which can indicate men live the development possibilities with an excessive competitiveness.

Finally, women presented lesser health than men, for which health programs should exist for women who work. These programs should be directed to prevention, orientation and treatment, due to women's double work schedule, having more wear on their health.

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