International Encyclopedia of Rehabilitation

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This publication of the Center for International Rehabilitation Research Information and Exchange is supported by funds received from the National Institute on Disability and Rehabilitation Research of the U.S. Department of Education under grant number H133A050008. The opinions contained in this publication are those of the authors and do not necessarily reflect those of CIRRIE or the Department of Education.

Aging and quality of life

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Defining aging

Aging is commonly understood as the process of maturing or becoming older; in fact aging is a broad term which includes several processes:

1) those changes happening along life,
2) individual differences attributed to age and, finally,
3) the group of aged or older people (in comparison among those younger) (see Birren, 1996).

As authors have pointed out, across a life span there is a continuous balance among stability, gains and declines, especially after the individual reached the third decade of their life (e.g. Baltes, 1978). Within this balance, it is important to distinguish between bio-physical and psychosocial changes; across a life span, bio-physical systems are those that lose efficiency, psychological characteristics maintain stability, and show gains and declines depending not only on the biological organism but also on the socio-cultural context, and on the control individuals exert through his/her behaviours; in other words, as Bandura (1978, 1987) pointed out, the organism, the person and his/her behaviour and the socio-cultural context interact continuously.

From a bio-medical point of view, aging is associated with illness. We must be aware that some declines or losses across life span are due to illness (secondary aging) but are not, per se, due to age (primary aging). In fact through this chapter we are going to take into consideration that any human life condition is due to the transaction between bio-physical, behavioural and socio-environmental circumstances (see Fernández-Ballesteros, 2008). In fact, quality of life of an individual depends on all of these circumstances.

But aging can be considered not only from the perspective of the individual because aging is also a population phenomenon; nevertheless, must we take into consideration that in this article we considered the quality of life in old age at group or individual levels.

Defining Quality of Life in old age

It has been emphasized that Quality of Life (QoL) is an extremely complex, abstract, and scattered concept difficult to define and has a high impact on research and practice (Fernández-Ballesteros, 1997; Walker, 2005a, b). QoL is a key concept in environmental, social, medical and psychological sciences, as well as in public policy and in the minds of the population at large; nevertheless, there is no consensus regarding the definition of QoL (Fernández-Ballesteros, in press).

Moreover, when QoL is referring to old age it must be required to address the broad diversity of ways of aging; that is, from successful aging through usual aging to aging with disability (and dependency). Consequently, from the very beginning we have to take into consideration that QoL in old age cannot be reduced to QoL in clinical or health settings but must have a general (normal) vision.

QoL general domains or criteria

Following a step by step process (Fernández-Ballesteros, 1997), from a semantic point of view, the term "quality" refers to a set of attributes or characteristics of a given object (in this case, life), and "life" is a wide category which would include all living beings but here we are referring to human aging. Therefore we considered a human subject or group of human beings; consequently, we did not take into consideration the QoL at the population level. The QoL at population level were necessarily measured through social aggregates such as the GDP (Gross Domestic Product), unemployed or poverty rate, or other social indexes of crime, suicide, public violence, family disintegration. All these indicators were used as measures of social welfare and well-being. At population level, the indicators usually considered were bio-medical aggregate and epidemiological indices such as mortality, morbidity and/or life expectancy rates.

One of the characteristics commonly accepted of QoL is its *dimensionality*; in other words, QoL can be related with a set of conditions (ingredients, components, etc.) of a given individual or groups of individuals. Two main strategies have been followed to establish those conditions: with experts and lay definitions.

From an expert point of view, Lawton (1991) proposed a Four Sector model in which psychological well-being, perceived quality of life, behavioral competence and objective environment were present in the QoL of older individuals. Hughes (1990) enlarged those domains considering the followings: personal characteristics of the individual (functional activities, physical and mental health, dependency, etc.), physical environmental factors (facilities and amenities, comfort, security, etc.), socio- environmental factors (levels of social and recreational activity, family and social network, etc.), socio-economic factors (income, socio-economic status, etc.), personal autonomy factors (ability to make choices, exercise control, etc.), personality factors (psychological well-being, morale, life satisfaction, happiness, etc.) and subjective satisfaction.

After reviewing several approaches (both theoretical and empirical) for understanding QoL Fernández-Ballesteros (in press) concluded that QoL integrates two broad dimensions: 1) *personal* or internal (e.g.: functional competence, health) versus *socio-environmental* or external conditions (e.g.: prosthetic helps) as well as 2) *subjective* (e.g. life satisfaction, subjective QoL) versus *objective* (e.g. income, physical environment) factors. All characteristics proposed by authors could be classified in these two dimensions but most importantly, the concept of QoL must integrate a set of both dimensions and never can be reduced to one them.

This view was accordance with Birren and Dieckmann (1991) when they established what *is not* quality of life: QoL is not equivalent of quality of the environment, is not equal to the quantity of material goods, is not equivalent to the physical health status, or to the quality of health care, just as it is distinct from subjective constructs such as life satisfaction, morale or

happiness. Similarly, Browne, et al. (1994) stated: "Quality of Life (QoL) is (the product) of the dynamic interaction between external conditions of an individual's life and the internal perceptions of those conditions". In summary, we cannot reduce QoL concept to life's external conditions or to personal characteristics (even the perception of external conditions), or to subjective or objective view of them.

Lay concepts of QoL

From a lay perspective, several authors have surveyed the conditions that older persons report to be important for *their QoL*. Brown and Flynn (2003) reviewed those components nominated by older people in selected studies, most of the population that was selected for these studies from several countries and world regions, identified the following factors as main aspects of QoL: good health, be independent, good pension/income, family and social relationships, be active, happiness, good living conditions and neighbourhood, opportunities for learning and development, religion. From this lay perspective, it was concluded that QoL of older persons was sharing a multidimensional concept of QoL, similar to experts.

Debates in QoL

In spite of this multidimensional conceptualization, during the last decades, QoL has experienced two main problematic issues: *reductionism* and *subjectivization*. That is, several authors have proposed instruments or indexes which reduced QoL to one of its components and/or considered only the subjective appraisal of wellbeing (happiness, satisfaction, etc.) or one of those several components reducing to health. For example, QoL has been defined as equivalent to the well-being in the social domain, to the health status in the bio-medical field (also called Health-related QoL), and to life satisfaction or happiness not only within the psychology field but in may others.

Referring the field of health, since the World Health Organization enlarges the concept of health from the absence of illness to the physical, mental and social wellbeing, QoL has been converted into a parallel conceptualization of health developing hundreds of items as the Health Related Quality of Life (HRQOL) most of them traditional measures of health. Recently, Halvorsrud and Kalfoss (2007) revealed that from the very outset, HRQoL has been the most commonly used category at the individual level concluding that among the QoL studies reviewed: “almost two-thirds ….where HRQoL was used as an overlapping term”.

The World Health Organization has not only changed the concept of health but has *subjectivised* the concept of QoL. So, under the assumption that “Quality” means “Subjective”, WHO developed and spread out a measure of QoL *WHO Quality of Life* measure. Thus, the WHO QoL group (1995) defined QoL as “an individual’s perception of their position in life in the context of the culture and value systems in which they live and in relationship to their goals, expectations and standards and concerns”.

In summary, QoL focusing on health can be considered a predominant field on QoL, usually consisting of subjective appraisal of symptoms in specific pathologies and in the subjective appraisal functioning of the individual. Thus, in spite of the fact that QoL is a multidimensional concept that arises from several disciplines (biology, medicine, psychology and sociology), from a bio-medical perspective, authors propose a *reductionistic* definition without balance between personal (internal) and external conditions, or subjective and

objective characteristics. This criticism is in many of QoL perspectives from social sciences or from psychology (Walker, 2005 a,b).

Regarding these criticisms, Fernández-Ballesteros (in press) concluded that two characteristics are embedded in the field of QoL. One is a *reductionistic* conception of QoL expressed by the HRQOL exponential growth of interest of QoL as an isomorphic concept of health within the medical context; the other is a *subjectivization* of the concept which must be called "Subjective Quality of Life" (SQOL) when several dimensions of QoL were reduced to the subject's appraisal of these dimensions.

QoL is a scientific concept used as an outcome of interventions and policies (among them, bio-medical interventions) when goals are the improvement of societal or individual living conditions. As Sampson (1981) pointed out, when bio-psycho-social changes were expected as outcomes of interventions (both at individual and population levels), these output cannot be reduced or transformed into their corresponding individuals' subjective appraisal. It is concluded that the focus from social or health policies must be assessed through objective and subjective outcomes of a given individual, group or a population or context. For example, on the field of aging, when policies are developed through social or health interventions at the individual or group level (as well as community or population levels), QoL must be operationalized through a set of expected outcomes: physical abilities and physical and mental health, social participation, etc., but also through other objective outcomes such as health and social services availability, better pensions, better physical environment, etc. QoL cannot be reduced to the subjective appraisal of those external life conditions.

The argument that QoL could be reduced to the subjective appraisal of one or several life circumstances could have perverse repercussions; that is, try to move up an individual's subjective appraisal changing his/her opinion but not improving their objective insufficient life conditions. In the next section several instruments developed in order to assess QoL in old age are going to be described, and in Table 1 and 2 components and characteristics of those selected instruments for assessing QoL can be found.

Instruments assessing QoL

General characteristics

Since there is not a commonly accepted definition of QoL, during the last thirty years dozens of QoL instruments assessing different components have been developed. Before presenting selected measures, let us introduce those proposed criteria for selecting the appropriated QoL measure.

Arnold (1991) pointed out that, in order to take decisions about QoL instruments, two main aspects have to take into consideration: the *assessment purposes* and the *target concerned*. Moreover, a third aspect that must be take into consideration for select a QoL measure is the instrument basic *method.*

Usually, QoL assessment is conducted for five *purposes*:

1) to understand the causes and consequences of assessing individual differences in QoL
2) to assess the impact of social and environmental interventions in QoL

3) to estimate the needs of a given population
4) to evaluate the efficiency or effectiveness of health interventions and/or the quality of the health care system, and
5) to improve clinical decisions.

Regarding the *target population*, although several efforts have been made in order to assess QoL in the general population (for example, Campbell, 1981), a review of QoL instruments indicates that age and health differences are the two most important target circumstances for selecting a QoL instrument. That is, a significant number of QoL instruments have been developed for the elderly, and among them the majority of QoL instruments for older people were health-related measures taking into consideration that the concept of QoL has had its greatest impact in medicine.

Finally, as was emphasized by Campbell (1981), although there are methods of rating available by other measures, the most common *method* for assessing QoL is self-report. Obviously, self-report is the most direct measure for assessing subjective appraisal for any of the conditions present in QoL; therefore, those instruments reducing QoL to subjective components (happiness, life satisfaction, health perception, etc.) are using self-report. At the same time, self-reports are also used for collecting objective conditions of health. Moreover, other sources of data can be used as external/objective variables as components of life in order to have a more complete picture; for example, rating-by-others. Moreover, in order to improve multi-method validity, some instruments include both types of procedure for collecting data: self-reports as well as rating-by-other scales. Hadorn and Hays (1991) tested the construct validity of two methods for assessing HRQoL through Multitrait-Multimethod (MTMM), although the authors conclude that the *construct validity of self-reported HRQOL* was supported, substantial method variance and little valid trait variance was observed for the HRQOL preferences. Therefore, the assumption that different methods are assessing the same component of QoL is not supported.

For example, assessing environmental conditions, Fernández-Ballesteros, Zamarrón & Maciá (1997) used both observational procedures and self-report evaluation in order to assess environment quality but they obtain low correlations among rating-scales and self-report about objective (external) characteristics. Also, rating scales have been proposed by Birren & Dieckmann (1991) emphasizing that, for assessing health status, physicians' ratings must complement self-report measures because they are better measures for health (The fact that we are defending the utilization of subjective as well as objective measures (in health as well as in other domains), in QoL assessment, does not mean that both can have different predictive values. For example, the Bonn Longitudinal Study (BOLSA), Lehr (1993), found that subjective health was a better predictor of longevity than objective health.).

As in the measurement of other constructs, QoL instruments must present certain *psychometric properties*: reliability (internal consistency and test-retest correlations), validity (criterion-related and construct validity) and sensitivity to change are the most important aspects reported in QoL measurement (Messik, 1995). Finally, since most of the instruments are self-reports, it must take into consideration the variance due to method as a common *source of error*. As has been pointed out by Fernández-Ballesteros and Zamarrón (1996), faking is a source of error of QoL self-report measures: those people high in faking reported better health, better environmental quality, and higher satisfaction than those low in faking.

Linked to health-related QoL assessment, instruments developed in a specific language/culture have been *translated and/or adapted* to other languages and contexts. As Anderson et al. (1993) point out: "it is difficult, if not impossible to make definitive statements about cross-cultural equivalence of measures". A review of the cross-cultural QoL literature points to the existence of two main problems: inappropriate translation/adaptation methods and the lack of investigation into psychometric properties in the new culture. The conclusion from the analysis of the most widely-used QoL instruments was that "none of the instruments reviewed were judged to have data available for all aspects of measurement equivalence considered. Too often, health-related QoL measures have simply been translated into another language linguistically, and immediately used in research with the assumption that the essential properties of the original instrument have been preserved" (Anderson et al., 1993). As is well known, psychometric properties in the 'original' (domain) version are not guaranteed in the new target version. Now the situation is much more positive: there are QoL instruments, such as WHOQoL, carefully adapted to several cultures/languages (Skevington, 2002). Skevington, Sartorious, Amit and the WHOQoL group (2004) report data of this instrument in 40 countries and many languages.

Moreover, international guidelines have been developed for test translation/adaptation (Hambleton, 1994). These guidelines have been extended to the field of aging by Fernández-Ballesteros, Hambleton & Van Vijver (1999) and are a step forward in the right direction to improve cross-cultural research in QoL.

In conclusion, in order to make decisions about instruments, the complexity of the QoL construct requires taking into consideration the objective of the study, the characteristic of the sample to be assessed, and the possibility to use multiple methods already adapted to the country/language.

General instruments of QoL for assessing old age

Table 1 shows a list of selected QoL instruments usually developed for the elderly. Those instruments are classified on base of the target population, the procedure used and their psychometric properties. In Table 2, the same instruments are examined through the domains included on base of our theoretical classification described in Section 2.

Table 1: Quality of life measures: psychometric properties.

Measure	Population	Administration	Reliability	Validity
Elderly community reactions to the nursing home (Biedwenharn & Baslin, 1991)	Institutionalized residents	Interviewer and self-administered	Limited	Limited
Evaluating the efficacy of physical activity for influencing quality of life outcomes in older adults (Stewart & King, 1991)	Elderly	Interviewer	Limited	Limited
Initial psychometric evaluation of a quality well-being measure: The Integration Inventory (Ruffining-Rahal, 1991)	Elderly	Interviewer	Limited	Limited
Multitrait-multimethod analysis of health-related quality of life measures (HRQOL; Hadorn & Ron, 1991)	General population and the elderly	Interviewer	Limited	Limited
Older American resources and services instrument (OARS; Duke University, 1978)	Elderly	Most experience obtained from interviewer	Extensive data available	Extensive data available
Nottingham health profile (PSN)(NHP; Hunt et al. 1981)	Health related	Interviewer and self-administered	Extensive data available	Extensive data available
Quality of life in elderly, chronically ill outpatients (Pearlman & Uhliman, 1991)	Elderly and chronically ill	Interviewer	Extensive data available	Extensive data available
Sickness Impact Profile (SIP; Bergner et al., 1981)	Extensive use in many populations, including chronically ill	Interviewer and self-administered	Extensive data available	Extensive data available
Subjective well-being instrument for the chronically ill (Gill, 1984)	Chronically ill	Interviewer	Limited	Limited
Quality of Well-Being Scale QWE (Kaplan & Bush, 1982)	Numerous populations, including chronically ill and frail elderly	Interviewer	Extensive data available	Extensive data available
Schedule for evaluation of individual QoL (SEIQoL; McGee et al., 1991)	Elderly	Interviewer	Limited	Limited
Elderly Cruz Roja Quality of Life (Guillén et al. 1990)	Elderly	Interviewer	None	None
CUBRECAVI (Fernández-Ballesteros & Zamarrón, 1997)	Elderly	Interviewer	Limited	Limited
FUMAT (Verdugo et al., 2009)	Experts	Self-administration	Limited	Limited
The Medical Outcome Study 36-Item Short Form Survey (SF-36; Ware and Sherbourne, 1992)	General population	Interviewer and self-administered	Extensive data available	Extensive data available
German Chronic Respiratory Questionnaire (CRQ; Puhan, 2005)	People with COPD	Interviewer and self-administered	Limited	Limited
WHOQOL (WHO, 1993)	General population	Interviewer and self-administered	Limited	Limited
EQUAL (Walker, 2005)	Elderly			
Quality of Life invetory (QOLI; Frisch 1994)	General population	self-administered	Limited	Limited
Quality of Life in Alzheimers' Disease (QOLAS, Albert, S.M, et al., 2000)	Patients with dementia	Interviewer	Limited	Limited
Alzheimers' Disease Related Quality of life (ADRQL, Rabins, et al., 2000)	Experts	self-administered	None	None

In order to select an instrument to measure QoL, it is not only important to focus on what domains it includes, but also in which are its psychometric properties. Since, it would be

impossible here to review each instrument, information about psychometric properties of each instrument are provided.

QoL is a multidimensional construct, so internal consistency is not applicable to the complete QoL instrument but to its subscales. Rand Health Status Measure-36 (MOS-36, Ware et al. 1989) is a good example of internal-consistency reliability coefficients. They range from moderate to high (from .67 to .90) in its different subscales.

In QoL there are domains which are very constant such as culture or financial resources, and domains which are more variable, including pain (Fernández-Ballesteros, 1992). This is known through the process of test-retest, which means assessment through the administration of a given instrument (or subscale) at two points in time. For example, test-retest reliability for the six Nothingan Health Profile (NHP; Hunt et al. 1981) domains ranged from 0.77 (energy subscale) to 0.85 (physical mobility and sleep subscales).

Criterion validity is a very frequently used both in concurrent or predictive format. For example, the Sickness Impact Profile (SIP; Bergner et al., 1981), which is used in rheumatoid arthritis and hip replacement, has a total score that correlates above 0.80 with specific measures of patients' functioning assessed concurrently (Anderson, Aaronson & Wilkin, 1993). However, these high correlations are strongly associated with the nature of the construct assessed for a given domain. In fact, if SIP emotional domains are correlated with another instrument assessing the same variables (e.g., anxiety or depression) correlations are only moderate. Also, Otero-Rodriguez et al. (2010) reported that among the older adults from the general population, two year changes in the SF-36 (as measure of HRQOL) predict mortality in the subsequent 4 years.

As we have already said, QoL is a multidimensional construct with different domains; therefore, construct validity is one of the most important procedures. For example, as mentioned above, in our QoL questionnaire validation studies, for different samples and different sources of data, we obtained a very close factorial structure (Fernández-Ballesteros y Maciá, 1996; Fernández-Ballesteros, Zamarrón y Maciá, 1997).

Finally, several authors emphasize the importance of QoL sensitivity measure for the changes in programs, treatment and over time (e.g., Kaplan & Bush, 1982). Ruiz & Baca (1993) assessed the Quality of Life Questionnaire ("Cuestionario de Calidad de Vida",CCV) sensitivity to change by comparing treated and non-treated insomnia subjects. Significant differences ($p<.001$) between pre- and post-treatment scores, in the predicted direction, were found both in CCV total score and in all domain scores (Social Support, General Satisfaction, Physical/ Psychological Well-being, and Absence of Work Overload/Free Time).

As an example of general instruments of QoL, let us briefly introduce one of the most widely used: the *World Health Organization Quality Of Life measure*. The WHOQOL (WHO, 1993, see also, Skevington, et al. 2004) is a general QOL instrument administered through the individual's self-report or through interview. WHOQOL has been developed cross-culturally and systematically and it has different forms for different purposes. It includes *subjective* overall QOL and health (4 items), and the individual's appraisal on the six domains of quality of life (Physical health/Energy and fatigue, Psychological Bodily image and appearance, Level of Independence/Mobility, Social/Personal relationships, Environment and

Spirituality/Religion/Personal beliefs), and twenty-four facets covered within each domain. Since four items are included for each facet, it a total of 100 items. There is a WHOQOL-Bref reduce to one from each of the 24 facets. All items are rated on a five point scale (1-5). WHOQOL (both 100 and Bref) has demonstrated to have discriminant validity, content validity, test-retest reliability and sensitivity to change.

Specific instruments within rehabilitation settings

Rehabilitation studies are developed within the bio-medical domain; thus, the assessment of QoL is referring health related quality of life instruments. Usually, those instruments on the field of rehabilitation have the purpose for evaluating a given intervention; therefore, the most important psychometric characteristic of them must be sensitivity. Table 1 showed selected QoL instruments usually used for rehabilitation listed on the basis of the target population, the basic administration procedure and their psychometric properties. Table 2 shows the same instruments analyzed through the domains included.

Table 2: Domains assessed in selected QoL instruments

	INDIVIDUAL														CONTEXTUAL	
	Physical functioning	Emotional functioning	Cognitive functioning	Social functioning	Life satisfaction	Health perception	Functional skills	Economic status	Cultural status	Recreation	Sexual functioning	Self-Esteem	Risk factors	Energy and Vitality	Physical environment	Services
Elderly community reactions to the nursing home	X	X				X								X		
Evaluating the efficacy of physical activity for influencing quality of life outcomes in older adults	X	X	X	X	X	X				X		X		X		
Initial psychometric evaluation of a quality well-being measure: The Integration Inventory		X		X	X	X	X					X		X		
HRQOL	X			X	X	X	X							X		
OARS	X	X	X	X		X		X		X						
NHP	X	X		X		X	X			X	X			X		X
Quality of life in elderly, chronically ill outpatients	X	X	X	X	X	X	X	X								
SIP	X	X	X	X		X		X		X				X		
Subjective well-being instrument for the chronically ill		X												X		
QWE	X			X												
Reintegration to normal living index	X							X								
SEIQoL	X	X		X	X	X	X	X	X	X			X	X		
Elderly Cruz Roja Quality of Life	X					X	X			X						
CUBRECAVI	X	X	X	X	X	X	X	X		X				X	X	X
FUMAT	X	X		X	X	X	X		X				X		X	X
MOS-SF-36	X	X	X	X		X	X							X		
CRQ		X				X										
LAWTON (1983)						X									X	
WHOQOL																
EQUAL	X		X	X	X										X	X
QOLI			X	X		X		X				X				
QOLAS	X		X	X			X									
ADRQL		X	X	X						X						

Several instruments developed in rehabilitation settings (independently of the type of rehabilitation) consider QoL as a subjective construct and mainly related to health; therefore, most of those instruments conceptualize QoL as the subjective appraisal of the individual within life domains such as health, mental and emotional, and social functioning. Few of them take into consideration other objective aspects of health.

On the field of aging and rehabilitation, several types of instruments have been proposed; thus, as Stewart and King (1994) have pointed out, special problems of some subgroups of older populations, such as cognitive difficulties or sensory limitations, may impede the use of self-report and, therefore, affect the choices regarding which would be the optimal method. To solve this problem, several methods are available, including performance-based testing, medical exams, clinical analysis and expert observations.

Lucke et al., (2004) assess quality of life in individuals with spinal cord injuries following rehabilitation, emphasizing the importance of environmental factors in QoL. These authors report several Swedish studies, where environmental barriers were less of a concern than in many other countries, researchers found no differences among perceptions of QoL in people with severely limited mobility, compared to those in the general population (Siösteen, 1990; Stensman, R., 1994)

Lawton (1991, 1994), an expert both in QoL and dementia, emphasized that people with the diagnosis of dementia were unable to accurately express their internal state. Nevertheless, he maintains it is possible to assess QoL in dementia patients even when the patients cannot report their evaluations. In summary, on the field of aging and QoL on rehabilitation settings, three major approaches can be found:

1) the assessment of several domains through self-reports
2) rating-by-others approach, and
3) environmental observations from experts.

As an example of QoL instruments developed on the field of aging and rehabilitation, let us introduce one of the most popular: the *Quality of Life in Alzheimers' Disease* (QOLAS, Albert et al., 2000). The QOLAS is a dementia QoL instrument, administered to the Alzheimer's patient and his/her care provider, which includes both qualitative and quantitative data. Respondents are interviewed and asked to identify what is important for their QoL. Two issues from each of the following domains are identified: Physical, Psychological, Social/family, Usual activities, and Cognitive functioning. Patients then are asked to rate how much of a problem s/he is currently feeling for each of the 10 issues on a 5-point scale (0 = no problem; 5 = it could not be worse). Scores range from 0 to 50 in which higher scores reflect poorer QoL. A limitation of the QOLAS is that psychometric properties have been obtained from a small sample of patients (only 22 dementia patient-care-providers dyads were assessed). Care providers and patients were interviewed separately. Internal consistency reliability measured by coefficient alpha was .78 for patients and caregivers. Construct validity was indicated by significant higher patient-reported QoL from a subgroup of patients with less disability in Activities of Daily Living as compared to patients with more disability. Agreement between patient-reported QoL scores and scores on a generic measure

of QoL ranged from low to medium (kappa ranged .09 to .67, *Mdn* = .45). For caregiver-reported QoL, kappa values ranged from low to high (range .09 to .82, *Mdn* = .47)

In summary, it seems that in the rehabilitation field there is more interest for the objective aspects of QoL, especially when the people are unable to self-report or have physical difficulties.

Concluding Remarks

Quality of Life is an important field for aging as well as for rehabilitation. In both fields, QoL is considered a multidimensional construct composed by several domains referring to the individual and his/her context. In spite of this fact, two main problematic issues have emerged: from a bio-medical perspective QoL is mainly reduced to health, and several health measures have been taken as QoL measures. When several domains were considered, QoL was reduced to the individual's subjective appraisal of those domains. This panorama determines the existence of a variety of self-report methods assessing QoL combined with a minority of rating-by-other scales. With some exceptions, QoL measures can be placed in an immature state. Our proposal here is to emphasize the multidimensionality of QoL and the strong need to use both subjective and objective components of those dimensions.

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