

HKSoQOL – SPACE Course

Quality of Life Measurement-----Applications in Medical, Rehabilitation and Social Services

生活質素評定-----在醫療、復康及社會服務的應用

Organizer:

Hong Kong Society for Quality of Life

10 sessions starting from 2 March 2006 to 4 May 2006, every
Thursday from 6:30 p.m. to 9:30 p.m.

Venue:

HKU SPACE

Course Aim and Objectives

The course is intended for people who are interested in the use of quality of life (QOL) as an outcome measure in their work or research. It will be of particular interest to doctors, nurses, occupational therapists, physiotherapists, social workers, psychologists and researchers of the industry. Quality of life (QOL) is a commonly used outcome measure of population health, medical interventions, rehabilitative care and social services in the recent decades. Research over the last three decades has enabled us to quantify quality of life with valid, reliable and sensitive measures. A number of widely used QOL measures are available in Chinese and have been validated on the population in Hong Kong. This course aims at helping participants to understand the basic concepts of quality of life and measurement theories underlying quality of life measures, and to apply commonly used quality of life measures in their work. At the end of the course, learners will be able to know when quality of life is an appropriate outcome measure and what QOL measure may be applicable to their work. The course will be conducted either in English or Cantonese supplement with English.

Course Outline

There will be 10 sessions, each lasting for 3 hours, with another 3 hours of reading. Active student participation with discussion and exercises are expected. The first two sessions are on the general

concepts and theories of quality of life, the last eight/ten sessions will be detailed review of the content, psychometric properties and applications of individual QOL measures.

1. *March 2, 2006 - The concepts of Quality of Life and Well-being (Mr. K.F Leung)*

In order to use QOL as an outcome measure, one must first understand what it is, when it is applicable, and what the results mean. The first session of the course will review the historical development and basic concepts of quality of life and its correlation with health, subjective well-being, function, life satisfaction and happiness. Factors and indicators of quality of life will be discussed within the context of the Chinese culture. The common applications of QOL measurement will be explored.

2. *March 9, 2006 - Quality of Life Measurement Theories (Dr. Cindy L.K. Lam)*

Quality of life is a latent variable that cannot be directly measured. It can only be inferred by a measurement of indicators that have a close relationship with it. QOL is multi-dimensional, and each dimension can have one or more indicators that can be quantified with a numerical score. This session will discuss the measurement theories and psychometrics (validity, reliability and sensitivity) of how the indicators are compiled into a QOL measure to give a numerical score of a person's quality of life. The purposes, structures, and scoring methods of different QOL measures will be reviewed.

3. *March 16, 2006 – Measuring Subjective Wellbeing: A Contemporary Approach (Dr Anna L.D. Lau)*

This session will review the concept and application of subjective wellbeing as a contemporary method of quality of life measurement. Commonly used or noteworthy measures of subjective wellbeing which are available in Chinese will be introduced. This session will emphasise the following instrument:

The Personal Wellbeing Index

This is a Subjective Quality of Life (Subjective Wellbeing) measure which contains seven items of satisfaction with various life domains. It is a cross-cultural instrument developed by over 45 countries, and has been translated and validated for Hong Kong use. The life domains tapped are broad and provides a comprehensive view of life quality. The instrument also contains three other forms for use with people with cognitive impairment and children. Both development and data generated by the index are informed by the Theory of Subjective Wellbeing Homeostasis.

4. *March 23, 2006 - The SF-36 Health Survey and related instruments*
(Dr. Cindy L.K. Lam)

This session will review the MOS 36-item Short-form Health Survey (SF-36), its Summary Scales and its abbreviated 12-item (SF-12) Survey Form. The SF-36 and SF-12 are the most widely used quality of life measure in the world. They are applicable to all ambulatory adults with adequate cognitive function for giving a reliable answer about themselves. These measures can be used in population health surveys, evaluation of impact of illnesses, clinical trials and longitudinal studies. A normal population reference is available for interpretation of results.

5. *March 30, 2006 - The WHO Quality of life Instruments*

This session will review several instruments that were developed by groups co-ordinated or supported by the World Health Organizations.

a. *The HK Chinese version WHO Quality of life measures – Abbreviated version, WHOQOL-BREF(HK) (Ms. Mary Chu)*

This measure was developed in a way to ensure relevancy to the HK culture and semantic equivalence in different language versions of the WHOQOL-BREF. The BREF(HK) consists of 26 items as in the English version of the WHOQOL-BREF and 2 national items that makes up of a 28 items questionnaire that covers four domains of QOL. The four domains are the physical, psychological, social relationship, and environmental domain. The instrument was validated in Hong Kong and is especially useful in the assessment of long-term treatment outcome when patients have returned to live in the community.

b. *The Hong Kong Chinese version WHO-Five Well being index, WHO-5(HK)*
(Mr. K.F Leung.)

This is a five items measuring the overall physical and psychological well being. The five items are covering positive mood (good spirits, relaxation), vitality (being active and waking up fresh and rested), and general interests (being interested in things). The Hong Kong Chinese version has undergone translation and linguistic validation. A quantitative validation project on social service is in progress

6. *April 6, 2006- Disease specific Quality of Life measures*

This session will review quality of life measures targeted at specific diseases or therapies

a. McGill Quality of Life Scale for palliative care (Dr. Raymond SK Lo)

This measure is designed specifically for patients in palliative care stage with advanced incurable diseases. QOL is the most important issue for these unfortunate patients when days can no longer be added to life. The McGill QOL-scale has been modified, and cross-culturally validated in a sample of 467 local HK Chinese patients. The spiritual/existential domain was proven to be the most predictive of overall QOL at the final stage of life. In a subgroup of 56 patients, the QOL was measured at a median of 5.6 days before death, reflecting a close approximation of self-perceived quality of dying. In this talk, the development and experience with MQOL-HK will be covered, with more details on the spiritual issues in relating to QOL.

b. The Chinese Quality of Life scale, ChQOL (Mr. K.F Leung.)

This is a QOL measure specifically developed as an outcome measure for Chinese medicine. The Chinese quality of life scale was developed basing on the concept of health of Chinese medicine. There are 50 items reflect 3 domains and 13 facets. The three domains are: the physical form, spirit, and emotion domain. The items are the manifestation of the balance of Ying and Yang of correspondence facets and domains. ChQOL is regarded as a self-perceived health status measures because it does not covers wider areas of health related quality of life. The measure was validated in both Mainland China and Hong Kong population.

c. QOL measures of arthritis (Ms. Eli Chu)

The Chinese version of the Arthritis Impact Measurement Scales 2 (CAIMS2). The Arthritis Impact Measurement Scales (AIMS) has been widely used to assess the health status of people suffering from arthritis. in many countries for years. It was a self-administered health status measure consisting of 45 items divided into nine subscales: (1) mobility, (2) physical activity, (3) dexterity, (4) social role, (5) social activities, (6) activities of daily living, (7) pain, (8) depression and (9) anxiety. This measurement scale was further revised into AIMS2. Three new scales: (1) arm function, (2) work and (3) support from family and friends were added to cover aspects of arthritis relevant health status that were not addressed by the previous measure. The Chinese version has undergone translation and linguistic validation.

7. April 13, 2006 - Quality of life measures for the Elderly (Professor Alfred Chan)

This session will review QOL measures specifically developed for the assessment of the Elderly.

- a. **GDS-4** is a 4-item measure abbreviated from the GDS-30. The four items were shown to tap the two first-order factors (positive and negative affect) which in turn tapped a higher-order construct of depression and provided excellent fit to the data and correlation with results of the GDS-30 ($r=.84$) and GDS-15 ($r=.80$). It was developed a 3-step binary logistic regression of the GDS-30 data from a study on 310 elderly persons attending outpatient psychiatric clinics. The result was cross-validated on a different sample ($N=134$).
- b. **Quality Of Life Scale For Older Chinese People In Hong Kong (HKQoLOCP)** was developed locally specifically for Chinese older persons in Hong Kong with an emphasis on cultural relevancy. The initial items were generated by focus group interviews followed by review by a panel of experts. The initial instrument. was tested on a representative community sample of 1,616 older persons aged 60 or above. Psychometric analysis of the data from the population sample identified the best 21 items that can provide an index and six domain scores (4 items on subjective well-being; 5 items on health; 6 items on interpersonal relationships; 4 items on achievement–recognition; one item each on finance and living conditions.

8. April 20, 2006 - Functional Assessment Instruments (Ms. Mary Chu)

This session will review commonly used measures that assess the function of people by subjective or objective methods.

- a. **Occupational Performance Appraisal Questionnaire, OPAQ** is developed in Chinese to capture the overall rehabilitation outcome that reflects the level of adaptation of people with permanent physical or psychological disabilities. OPAQ consists of 7 questions asking subjective appraisal of occupational performance in 7 essential occupational areas, which are: self care, domestic, work, communication with people, leisure, use of public facilities and balanced use of time. The changes of OPAQ scores before and after therapy reflect the level of adaptation of the individual to his/her own disabilities, the environment, and the personal goals and expectations.
- b. **Barthel Index** is a functional measure to assess the change in performance of basic tasks of everyday life such as feeding, transfer, personal hygiene. It consists of a total of 10 items and scores for each item have been weighted. The final item scores range from 0 to 15 and the total score of BI ranges from 0 to 100. There is also a simpler version of BI-20 with final item scores range from 0 to 20. The instrument has been used extensively as a functional measure for patients undergoing physical rehabilitation.

- c. **Lawton IADL Scale** is an instrument that measures more complex daily tasks that are essential for independent community living. It consists of 8 separate items including ability to use telephone, mode of transportation, shopping, medication management, money management, meal preparation, housework and laundry. Individual item score ranges from 0 to 1 and the total score ranges from 0 to 8. The higher the total score the more independent is the individual's ability to live in the community.

9. *April 27, 2006 – Preference-based Health (Utility) Measures*

This session will review the conceptualization and methodology of how QOL can be summarized into a single preference-based health (utility) index. The main application of a QOL utility measure is for the estimation of quality adjusted life years (QALYs) in health economic analyses. QOL is multi-dimensional and it is necessary to know the relative utility weight of each dimension in order to obtain a summary QOL utility index score. The commonly methods for eliciting preference-based health values on multi-attribute health states will be reviewed. The Chinese (Hong Kong) SF-6D, a preference-based utility measure derived from the SF-36, will be used as an illustration.

10. *May 4, 2006 – Psychometrics & Statistics of Quality of Life Data Analysis (Dr. Daniel Fong)*

This session will review the commonly used statistical and psychometric tests in the analysis of quality of life data.