Health-related quality of life in women with breast cancer in Iran - A methodological and clinical study

AKADEMISK AVHANDLING
som för avläggande av medicine doktorsexamen vid Karolinska Institutet offentligen försvaras i Sal H2 Grön, Zanderska huset, Alfred Nobels Allé 23, Karolinska Institutet, Huddinge

Fredag den 23 mars, 2012, kl 10.00

av
Camelia Rohani

Huvudhandledare:
Professor Ann Langius-Eklöf
Karolinska Institutet
Institutionen för neurobiologi, vårdvetenskap och samhälle

Bihandledare:
Docent Heidar-Ali Abedi
Isfahan University of Medical Sciences
Faculty of Nursing & Midwifery

Fakultetsopponent:
Professor Tiny Jaarsma
Linköpings universitet
Institutionen för samhälls- och välfärdsstudier

Betygsnämnd:
Professor Anna Strömberg
Linköpings universitet
Institutionen för medicin och hälsa

Professor Birgit Rasmussen Holritz
Umeå universitet
Institutionen för omvårdnad

Docent Monica Lagerström
Karolinska Institutet
Institutionen för neurobiologi, vårdvetenskap och samhälle

Stockholm 2012
ABSTRACT

Background: Breast cancer is the most common cancer in women in Iran and is the most common cancer in women both in the developed and the developing world. Living with breast cancer often involves making fundamental changes in life. The breast cancer illness trajectory may negatively affect various dimensions of the patients’ health-related quality of life (HRQoL), but may also vary greatly between individuals. The main aim of the present thesis was to investigate HRQoL and its determinants as well as to study coping abilities in women with breast cancer living in Iran in comparison with women without breast cancer before final diagnosis and 6 months later.

Method: The thesis is based on four studies. The first two studies are methodological and include five self-rated psychometric instruments for the Persian language: Health Index (HI), Sense of Coherence (SOC) scale, Spirituality Perspective Scale (SPS), Brief Religious Coping (RCOPE) scale and SF-12 Health Survey version 2 (SF-12v2). The psychometric tests were given to a healthy sample of Iranian population (n=333). In the third study the five instruments were applied at the pre-diagnosis phase (T1) and 6 months later (T2) in a sample of women with breast cancer (n = 162) and in a control group of women seeking mammography who were subsequently diagnosed as not having breast cancer (n= 639). In the fourth study, using the same samples as in Study III (women with breast cancer and controls), the mediating effect of SOC was investigated.

Results: Almost all hypotheses tested for validity were confirmed. An exploratory factor analysis and structural equation modeling for the SF-12v2 verified a two-factor structure (a physical component summary and a mental component summary) in accordance with the original factor structure. The reliability of the instruments as measured by internal consistency and intra-class correlations was satisfying. When compared with the control group, the Iranian women with breast cancer rated impaired physical functioning, fatigue and financial difficulties most prominent during the first 6 months after pre-diagnosis. At the same time, the patients with breast cancer improved their perception of global quality of life and emotional functioning. The most important predictors of the HRQoL dimensions were SOC followed by baseline ratings of the respective dimensions. Furthermore, SOC mediated the role of baseline values of HRQoL to follow-up HRQoL values after 6 months. The concept of SOC was a stronger predictor of HRQoL than religious coping and spirituality.

Conclusion: The SOC, HI, SPS, Brief RCOPE and SF-12v2 were found to be psychometrically sound instruments, implying that they are suitable for use in health surveys in an Iranian population. When planning nursing care for women with breast cancer in Iran, it is important to integrate HRQoL measures early in the illness trajectory. Our findings suggest that focus should be on physical functioning, fatigue and financial difficulties. As in other cultures, the concept of SOC seems to be applicable to the Iranian context and thus should be considered in individual valuation of coping ability along with religious coping and spirituality.

Key words: health-related quality of life, breast cancer, sense of coherence, spirituality, religious coping, well-being, psychometric tests