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Physiotherapy

Physiotherapy 97 (2011) 33–46

Does the Comprehensive International Classification of Functioning, Disability and Health (ICF) Core Set for Breast Cancer capture the problems in functioning treated by physiotherapists in women with breast cancer?

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Abstract

Objective The Comprehensive International Classification of Functioning, Disability and Health (ICF) Core Set for Breast Cancer is an application of the ICF, and represents the typical spectrum of problems in functioning and contextual factors that may influence functioning of patients with breast cancer. The objective of this study was to examine the content validity of this ICF core set from the perspective of physiotherapists.

Design Physiotherapists from around the world experienced in the treatment of patients with breast cancer were interviewed about patients' problems, patients' resources and environmental aspects that physiotherapists take care of in a three-round survey using the Delphi technique. The responses were linked to the ICF. The degree of agreement was calculated by means of the Kappa statistic.

Participants Physiotherapists experienced in breast cancer treatment.

Results Fifty-nine physiotherapists from 19 countries named 769 problems treated by physiotherapists in patients with breast cancer. One hundred and sixty-six ICF categories were linked to these answers. Nineteen ICF categories reached >75% agreement among the physiotherapists but are not represented in the Comprehensive ICF Core Set for Breast Cancer. Ten concepts were linked to the not-yet-classified personal factors component. Eleven concepts are not covered by the ICF. The Kappa coefficient for the agreement between the two persons who performed the linking was 0.66 (95% bootstrapped confidence interval 0.63 to 0.68).

Conclusions The content validity of the Comprehensive ICF Core Set for Breast Cancer was largely supported by the physiotherapists. However, several issues were raised which were not covered and these need to be investigated further.

Keywords: Comprehensive ICF Core Set for Breast Cancer; International Classification of Functioning; Disability and Health (ICF); Physiotherapy; Rehabilitation; Breast cancer; Delphi technique

Background

Breast cancer is the most common type of cancer among women worldwide [1]. The projected mortality from breast cancer in women worldwide in 2010 is 437 000 [2], and approximately 1 million women are diagnosed with breast cancer each year. However, incidence and mortality rates vary widely in different countries; they are high in most industrialised countries (except Japan), intermediate in Eastern and Southern Europe, and low in central and tropical South America, Africa and Asia [3].

Due to advances in the treatment of breast cancer, including the combined use of surgical intervention, radiation therapy and chemotherapy, cancer survival rates have

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doi:10.1016/j.physio.2010.08.010

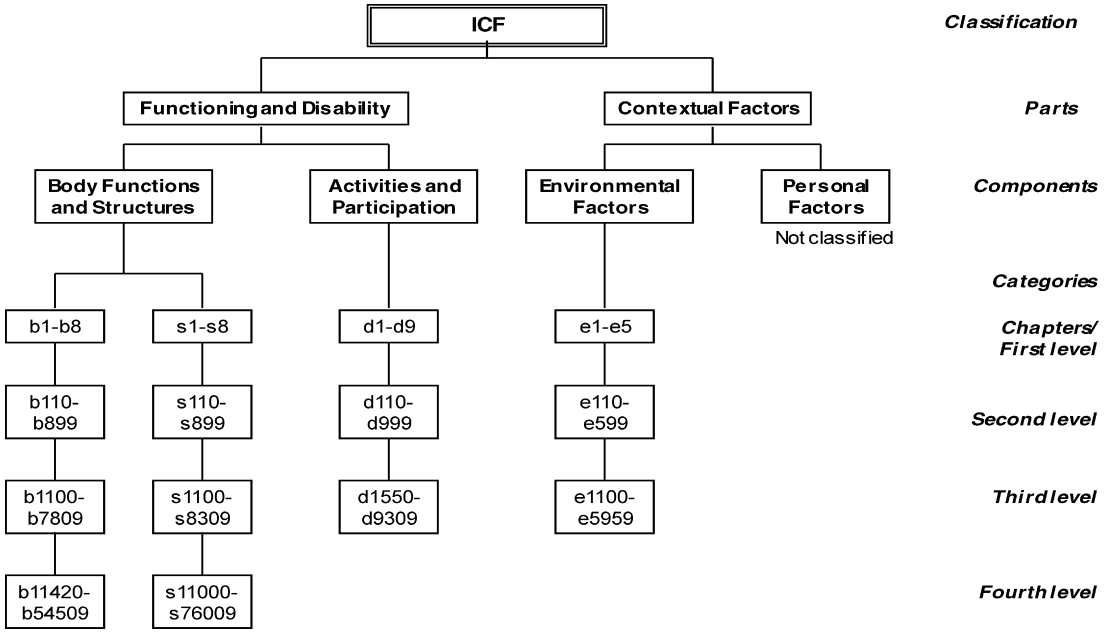

Fig. 1. Structure of the International Classification of Functioning, Disability and Health.

increased to 50% [4]. However, breast cancer is associated with a wide range of functional impairments. Pain, limited range of motion and lymphoedema of the affected arm can result from primary surgical treatment [5–7]. Untreated lymphoedema gradually worsens with time [8]. Anxiety, depression, loss of energy or fatigue, and sleeping problems are common responses to stressors [9,10]. A significant proportion of women also suffer from disturbances in body image and self-concept [10,11]. Moreover, social isolation and disruptions in family and sexual relationships are related to fears of recurrence and death [10–13]. Finally, the side-effects of treatment, as well as inactivity secondary to treatment, can impair activity and participation, decrease independence and affect quality of life [10,14].

Taking the diversity of consequences of breast cancer into account, a multidisciplinary approach seems appropriate. Rehabilitation after breast cancer requires a multiprofessional team including physicians, psychologists, nurses, social workers and, particularly, physiotherapists [9,10]. Physiotherapists are part of the multiprofessional team to prevent and restrict physical sequelae. In order to reach these rehabilitation goals, physiotherapists use different systemic treatment approaches and advise patients regarding prevention or how to apply compensation strategies [15,16].

To optimise interventions aimed at maintaining functioning and minimising disability, a proper understanding of the patient's functioning and health status is needed. The International Classification of Functioning, Disability and Health (ICF) provides a useful framework for achieving this understanding, and constitutes a common language among the different health professionals [17]. According to the ICF, the problems associated with a disease may concern body functions and body structures, activities and participation in life situations. Health states and the development of disability are modified by contextual factors such as environmental and personal factors [17].

The ICF is structured into two parts: functioning and disability, and contextual factors; each of which has two components (Fig. 1). Within functioning and disability, the body part consists of two domains: body functions and body structures. Chapters within these two domains are organised according to body systems. Activities and participation covers domains of functioning from both an individual and a societal perspective. In contrast to other disability models, the ICF classifies contextual factors that may either facilitate or hinder functioning, and therefore influence potential disability. These contextual factors consist of two components: environmental factors, including factors in the physical, social or attitudinal world; and personal factors, including age, habits, lifestyle, coping style, etc. The personal factors component is not yet classified.

Both the content and the structure of the ICF point out their potential value for rehabilitation professions, especially physiotherapists. Physiotherapists may use the ICF to assess the patient's functional status, which is the basis for intervention planning [18]. In contrast to profession-specific guides, such as the 'Guide to Physical Therapists Practice' of the American Physical Therapy Association [18], the common language of the ICF crosses professions and health disciplines. Therefore, ICF data can be communicated effectively between all members of the rehabilitation team.

However, the ICF as a whole, with more than 1400 categories, is not feasible for use in clinical routine. To facilitate the implementation of the ICF into clinical practice, so-called 'ICF core sets' have been developed for a number