

Original article

Application of WHO recommendations in outcome assessment of clinical series published in hand surgery journals with five years interval

Application des recommandations de l'OMS dans l'évaluation des résultats des séries cliniques publiées dans les journaux de chirurgie de la main avec 5 ans d'intervalle

H. Alarab ^{a,*}, T. Dubert ^b

^a Department of Orthopaedic Surgery, Centre Hospitalier René-Dubos, 6, avenue de l'Ile-de-France, 95300 Pontoise, France

^b Urgences main de l'Est parisien, hôpital privé Paul-d'Egine, 4, avenue Marx-Dormoy, 94500 Champigny-sur-Marne, France

Received 6 March 2014; received in revised form 2 September 2014; accepted 25 November 2014

Available online 24 December 2014

Abstract

Outcome measurement is becoming increasingly important in hand surgery. The International classification of functioning, disability and health (ICF), is a WHO multi-dimensional approach to health condition including three domains: body “functions and structures”, activities and participation. The aim of this study was to measure how often these three ICF domains were included in outcome measurements of the clinical series published in the American, European and French hand surgery journals. Our study included clinical series published in 2007 and 2012 in the American Journal Of Hand Surgery, European Journal Of Hand Surgery and Chirurgie de la Main. Analysis of each of these publications was done in two steps. First, we checked the presence or absence of the three domains of ICF in outcome measurement without considering the way it was measured. Then, we reported the use of evaluation instruments and/or quantitative measurement for each domain. We included 54 series in 2007 and 119 in 2012. The number of series reporting on the three domains and using at least one quantitative measurement for each domain represents 6% of articles in 2007 and 10% in 2012. This study shows that the quality of outcome measurement has improved over these 5 years, but remains poor according to the ICF recommendation.

© 2015 Elsevier Masson SAS. All rights reserved.

Keywords: Outcome; ICF; Hand; Evaluation; Global

Résumé

L'évaluation des résultats devient de plus en plus importante pour les chirurgiens de la main. La Classification internationale du fonctionnement, du handicap et de la santé (CIF) est une description par l'OMS du caractère multidimensionnel de l'état de santé. La CIF définit les composantes de l'état de santé global en prenant en compte les structures et capacités organiques, les activités définies comme l'accomplissement de tâches par le patient en tant d'individu et la participation qui désigne l'implication d'une personne dans une situation de vie réelle. Le but de cette étude était de décrire la prise en compte de ces trois catégories dans les séries cliniques publiées dans les journaux américain, européen et français de chirurgie de la main. Les séries cliniques sélectionnées ont été publiées en 2007 puis en 2012 dans l'*American Journal Of Hand Surgery*, l'*European Journal Of Hand Surgery* et *Chirurgie de la Main*. L'analyse a été réalisée en deux étapes : la première étape a consisté à relever la prise en compte de chacun des trois domaines d'évaluation de la CIF sans aucune précision sur la méthode utilisée. La deuxième étape a consisté à relever l'utilisation ou non des données quantitatives et/ou d'outils de mesure pour chaque domaine. Nous avons inclus 54 séries publiées en 2007 et 119 en 2012. Le nombre d'articles prenant en compte les trois domaines de la CIF avec utilisation d'au moins une mesure quantitative pour chaque domaine était de 6 % en 2007 et 10 % en 2012. Cette étude descriptive montre que la qualité de l'évaluation s'est améliorée en 5 ans, mais reste insuffisante suivant les critères de la CIF.

© 2015 Elsevier Masson SAS. Tous droits réservés.

Mots clés : Résultats ; CIF ; Main ; Évaluation ; Global

* Corresponding author.

E-mail address: hichamalarab@gmail.com (H. Alarab).

1. Introduction

Lack of accuracy of outcome measurement has been often reported in medical literature [1]. The International Classification Of Functioning, Disability And Health (ICF) is an integrative bio-psychosocial model of function and disability. Since it was adopted in 2001 by the World Health Organization (WHO), it helps to understand and improve outcome measurement [2]. ICF is now used in clinical practice [3] including hand conditions [4,5]. It is composed of three main domains of outcome called body “functions and structures”, activities and participation.

Body functions and structures (BF and BS) address a specific organ. Impairments in BF and BS are measured by clinical examination or imaging [5]. Typical criteria of BF in hand surgery are strength, stability or pain. Typical criteria of BS are bone union, or skin defect. They are usually labeled as objective measurements because they are examiner-reported.

Activities refer to the execution of a task or action by an individual. Activity limitations are usually patient-reported using self-evaluation questionnaires. Typical examples of activities are daily life tasks as in the DASH questionnaire [6].

Participation refers to involvement of an individual in a life situation. Participation restrictions typically concern work, family life and relationships abilities. They may be community-reported.

This study was designed to find out how frequently these three ICF categories were used to assess the results of the clinical series published in hand surgery journals in 2007 and again in 2012.

2. Material and methods

The papers analyzed in this study were selected from three hand surgery journals referenced in the Medline database: the American Journal Of Hand Surgery (JHSA), the European Journal Of Hand Surgery (JHSE) and *Chirurgie de la Main* (CM) in 2007, then in 2012. Only case series including more than ten cases and evaluating a therapeutic procedure in age-working adults with a significant follow-up were included. Some papers focusing on one specific aspect instead of global outcome were excluded.

Analysis of each of these papers was done in two steps. In the first step, we noted the presence or absence of the three domains of the ICF. In the second step we analyzed the methods of measurement of each. The use or absence of evaluation instruments and/or quantitative measurement was noted for all groups.

3. Results

According to the inclusion criteria, 54 articles were included in 2007: 28 from the JHSA, 19 from the JHSE and 7 from CM. In 2012, 119 articles were included: 64 from the JHSA, 37 from the JHSE and 18 from CM (Fig. 1).

3.1. Presence or absence of the three domains of the ICF

All articles in 2007 and 2012 reported on BF and BS outcome. In 2007, activities were mentioned in 36/54 (67%) and participation in 25/54 papers (46%). Details in each journal are shown in Fig. 2. All three domains of outcome measurements were mentioned in 16 out of 54 articles (30%). Of these 16 articles, eight came from JHSA, eight from JHSE and none from CM.

In 2012, activities were mentioned in 92/119 (77%) and participation in 52/119 papers (43%). Details in each journal are shown in Fig. 3. All three domains of outcome were mentioned in 46 out of 119 articles (39%). Of these 46 articles, 24 came from JHSA, 13 from JHSE and nine from CM. (Fig. 4).

3.2. Methods of measurement

The second step of this study showed that all the articles in 2007 and 2012 mentioned quantitative measurements of BF and BS.

In 2007, 35% of all series used evaluation instruments and/or quantitative measurement for activities and 13% for participation, compared to 57% and 13% respectively in 2012 (Figs. 5 and 6).

After the second step, we found three articles (6% of all the series) in 2007 and 12 articles (10% of all the series) in 2012 taking into account the three domains of outcome using evaluation instruments and/or quantitative measurement. In 2007, the three articles were published in the JHSE. In 2012, 2



Fig. 1. Publications included in the study according to journal in 2007 and 2012.

Download English Version:

<https://daneshyari.com/en/article/4048803>

Download Persian Version:

<https://daneshyari.com/article/4048803>

[Daneshyari.com](https://daneshyari.com)