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Knowledge and use of the international classification of functioning, disability and health (icf) among health professionals in a developing country

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KNOWLEDGE AND USE OF THE INTERNATIONAL CLASSIFICATION OF FUNCTIONING, DISABILITY AND HEALTH (ICF) AMONG HEALTH PROFESSIONALS IN A DEVELOPING COUNTRY

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ABSTRACT:

Background: The World Health Organization's (WHO) International Classification of Functioning, Disability, and Health (ICF) provides a biopsychosocial framework for understanding all the factors that should be considered while managing any health condition. The ICF has been employed for clinical, academic, research, and policymaking purposes in developed as well as developing countries. There is a great disparity in the representation in the literature regarding knowledge and potential application of the ICF in professional practice around the world especially from low middle-income countries like Pakistan.
This study aims to evaluate the profile and knowledge of health professionals in Pakistan about the application of ICF in their practice.

Key words: ICF, Pakistan, knowledge

INTRODUCTION: The World Health Organization's (WHO) International Classification of Functioning, Disability, and Health (ICF) provides a biopsychosocial framework for understanding all the factors that should be considered while managing any health condition. The ICF encompasses body functions and structures, activities and participation, as well as the environmental and personal factors [(1)]. The ICF has been employed for clinical, academic, research, and policymaking purposes in developed as well as developing countries. Despite many publications about the implementation of the ICF in North America, Germany and Scandinavia there is little information in the literature regarding knowledge and potential application of the ICF in professional practice with great variation in different parts of the world [(2)].
Pakistan, a low & middle-income country (LMIC) has the sixth largest population in the world [(3)]. For health professionals, disability in Pakistan is perceived to be a medical construct and only they only capture severe impairments [(4)].

This study aims to assess the knowledge base of health professionals in Pakistan regarding ICF. The results will aid us in the next steps of translating ICF knowledge into our day to day clinical practice and to make it an integral part of our academics and research.

Objectives

This study aims to evaluate the profile and knowledge of health professionals in Pakistan about the application of ICF in their practice.

Methodology

This observational cross-sectional study using public survey was conducted for a period of 1 month after being approved by the Hamilton Integrated Research Ethics Board (HiREB) (Project number 7049), Canada. The study participants were health professionals including physicians (staff, fellows, and residents), nurses, physiotherapists, occupational therapists, psychologists, and speech therapists from Karachi,

Pakistan. Opinion was gathered from colleagues as part of knowledge evaluation. We used an online questionnaire with multiple-choice questions drawn up from a previous study [5]. The questionnaire was distributed through a snowball system using personal contacts and social media to achieve the greatest number of responses. The questionnaire was developed in a specific universal application (SurveyMonkey®) for electronic questionnaires and an electronic link was provided. 13 multiple choice questions regarding professional training and basic knowledge about the ICF were formulated. Descriptive statistics (measures of frequency, percentage and absolute number for categorical variables) for the characterization of the professionals and their responses were calculated in SurveyMonkey and visualized graphically.

Outcome of interest was the awareness/knowledge of health care professionals about ICF based on correct responses.

Results

40 health professionals received the questionnaire and 32 filled it out (response rate 80%). Table 1 shows the demographic data. Two-thirds (n=22) indicated to be familiar with the concept of ICF. Regarding the first interaction with ICF, 29% (n=9) reported that they came across the concept during training while 22.5% (n=7) became aware of ICF during their clinical practice. There were 3 questions to assess the knowledge of the health care providers regarding ICF (Figure 1a, b, and c). The first question, which was about the meaning of the acronym of ICF, was responded correctly by 78% (n=25) of the participants. However, only 47% (n=15) of the health professionals were aware of the concept of ICF. Also, when asked about the domain which was not a part of ICF, only 31% (n=10) health providers identified the correct option.
Two-thirds (66%, n=21) of the health professionals denied using ICF in the clinical, research, academics, or health management. The response to the question which pertained to the reason of not using ICF, 25% (n=8) implicated lack of knowledge as a reason for lack of application, which was followed by not considering it feasible due to "other" reasons. The other reasons included not being a part of organizational policy and being introduced recently. However, when indirectly inquired about the application of ICF concepts in health professionals' day to day life, through a question that asked about how often the health professionals asked about their patient's general activity, their involvement in their society, supports or barriers in their surroundings and personal factors that influence their lives secondary to their health condition, around 40% (n=13) of the respondents reported they did it routinely.

Table 1: Characteristics of the respondents (n=32)

Variable	N (%)
Age distribution	
20 to 30 years	9 (27.3%)
31 to 40 years	21 (63.7%)
41 to 50 years	3 (9%)
Gender distribution	
Male	5 (15.6%)
Female	27 (84.4%)
Highest level of education among health professionals	
Graduation	3 (9.68%)
Masters	6 (19.35%)
Specialty and subspecialty training (residency or fellowship)	20 (61.29%)
PhD	1 (3.23%)
Post-doctoral fellow	2 (6.45%)
Years of experience after training	
Less than 2 years	9 (28.13%)
2 to 5 years	11 (34.38%)
6 to 10 years	6 (18.75%)
>10 years	6 (18.75%)
Health related fields	
Physician	19 (59.38%)
Physiotherapist	5 (15.63%)
Psychologist	3 (9.38%)
Nurse	2 (6.25%)
Speech and language pathologist	1 (3.13%)
Other	2 (6.25%)
Areas of employment	
Private health organization	(81.25%)
Government health organization	(3.13%)
Other	(15.63%)
Areas of exposure to ICF	
During health and allied health training	9 (29%)
Clinical practice	7 (22.58%)
Research	2 (6.45%)
Courses/workshop	2 (6.45%)

Discussion

The ICF has been developed to provide a common language to describe health conditions with the biopsychosocial model [1]. However, this has not been consistently seen in the developing world. This is the first survey from Pakistan, evaluating the knowledge profile of health professionals about ICF. Most of the health care providers surveyed were aware of the concepts of ICF. However, the framework was not being applied in practice. The results obtained were quite similar to a study carried out in Brazil (5) evaluating the knowledge of occupational therapists and physiotherapists. That survey had 1313 participants, out of which 72 % had knowledge of the concepts of ICF, 84% knew the meaning of the acronym of ICF, and only 29% were aware of all constituents of the framework [5]. Our survey with 32 participants showed 50% of them knowing the concept, while 83% were aware of the full form of the acronym and only 31% correctly identified the parts of the framework. Previous studies have highlighted limited knowledge among health professionals, high workload, and the need to

spend time and money to gain the skills to be the main reasons for the limited integration of ICF in their daily practice. [5] One other observation after the literature review was that the studies were mostly limited to health professionals of rehabilitative medicine i.e. physiotherapy, occupational and speech therapy (3). This is due to the observation that the rehabilitation professionals have used ICF extensively in the facilitation of multidisciplinary team communication, for the shaping of the course of rehabilitation, for goal setting and assessment, as well as for documentation and reporting (5). We were unable to find studies that looked at the knowledge profile of the physicians and nursing staff. The lack of uniformity in studies indicates the potential knowledge gap between different groups of health professionals. Efforts are required to bridge this gap in the developed as well as the developing countries. According to the results obtained, the health professionals in Pakistan have shown awareness and some knowledge of the concepts of ICF which is comparable to other developing countries. The way forward from this survey is to promote dissemination and propagate different applications of ICF in our community to ensure holistic care to our already ostracized people. The strength of this project is that this is the first study from Pakistan which attempted to include all health professionals to gauge the knowledge profile. However, the limitations include lack of representation of occupational therapists, behavior therapists and lack of representation from other cities and peri-urban areas.

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