

# ICF AND ITS APPLICATION IN CLINICAL PRACTICE BY PHYSIOTHERAPIST OF ARUNACHAL PRADESH

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# **ABSTRACT**

**Introduction:** The ICF helps to explain how a person's body problems and social circumstances affect their functioning by defining the interaction between health conditions, body function, body structures, personal and social factors, daily activities and social life<sup>6</sup>. For professionals involved with the rehabilitation process, such as, Physiotherapist, it is even more important to use as they deal with functionality and its dysfunctions. Regardless of its relevance that extends beyond clinical practice, the question about its applicability among the Physiotherapist of Arunachal Pradesh in their clinical practice is still lacking. Therefore this study aims to provide an updated overview of knowledge and understanding the way in which the ICF is used by Physiotherapists of Arunachal Pradesh.

Method: A survey was conducted by sending the link of the questionnaire through a social media whatsapp group "Arunachal Physio", "IGTAMSU Alumni" and "Unemployed Physio", to achieve the greatest number of professionals.

**Result:** A total of 32 physiotherapists participated in the study and a maximum number of participants had some specialization (62.5%) as their highest level of qualification. This study showed that majority of the physiotherapists had a knowledge about the ICF (75%) and thought it is feasible to use in their professional work (87.5%) but still maximum of the participants did not use it in their daily practice (75%).

**Conclusion:** This study indicated that most of the physiotherapist even after having knowledge about the ICF do not apply it in their daily professional practice and the reason being they consciously opt not to implement it due to various reasons and until a higher authority such as National Health Ministry and health department gives an instruction it will remain the same in Arunachal Pradesh and India as a whole.

Key words: ICF, physiotherapists, Arunachal Pradesh, WHO

# INTRODUCTION

Worldwide, the rate of disabilities are increasing due to population aging and increase in chronic health conditions. <sup>1,2</sup> Though Health is defined as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" which was framed half a century ago, health is still measured narrowly in terms of morbidity and mortality. To overcome this, The World Health Organization (WHO) developed a framework called International classification of Functioning, Disability and Health (ICF) for measuring health and disability at both individual and population level. <sup>4</sup> The International Classification of Functioning Disability and Health (ICF) is a biopsychosocial model of functioning, health and disability that holds great promise for providing the rehabilitation disciplines with a universal language. The comprehensive and holistic nature of the ICF makes it extremely useful in clinical practice and is essential for making more informed assessments, developing more effective interventions, and achieving good patient outcomes <sup>5</sup>.

The ICF helps to explain how a person's body problems and social circumstances affect their functioning by defining the interaction between health conditions, body function, body structures, personal and social factors, daily activities and social life<sup>6</sup>.

In ICF, "Health condition" is an umbrella term for the disease, disorder, injury and trauma. "Body function" is the physiological functions of the body system, including psychological functions and "body structures" is used to describe anatomical parts of the body, such as organs, limbs and their components. Whereas "personal and social factors" includes the particular background of an individual's life, their physical, social and attitudinal environment in which people live. "Daily activities and social life" or "activity and participation" is the execution of a task or action by an individual and involvement in a life situation. Activity limitation describes the problems or issues at the level of the individual and participation restrictions are problems the individual may experience in their life situation or within an environmental context. The relationship between these various domains and components is reciprocal, which explains how they interact by mutually influencing one another.<sup>5</sup>

The ICF emphasizes on health status rather than medical deficits, the inclusion of environmental contexts in the framework and its non-linear approach aiming the ICF components are all factors that makes it an appealing conceptual framework for rehabilitation professionals<sup>8</sup>. The ICF is universal and it applies to all people regardless of age, gender, socioeconomic status and health condition. It is neutral and does not relate a person's functioning to the cause of their health status. ICF provides a continuum between functioning and disability and act as neutral language when describing health and health-related states.<sup>7</sup>

In addition, the ICF has recognized the importance not only in the field of Health, but also in the fields of Education, research, Sociology, Pedagogy, Politics, Labor, Social Security, among others.<sup>4,9</sup> ICF was established by the WHO which was approved in May 2001 during the 54<sup>th</sup> World Health Assembly and since then, several studies reported the increased interest about its use in different sectors.<sup>4</sup>

For professionals involved with the rehabilitation process, such as, Physiotherapists, ICF use is even more important, after all the profession historically deal with functionality and its dysfunctions. The ICF use is very important, since it can contribute to the adoption of a holistic practice focused on the functional potentialities of the individual.<sup>9,10</sup>

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The impairments associated with any kind of disability displays a variety of clinical signs and symptoms affecting the

quality of life, therefore needing an interdisciplinary approach with different experts for effective rehabilitation program. In

many countries, in practice, the one of the core team of the interdisciplinary approach consists of physiotherapists. 11

Physiotherapists are valuable members of multidisciplinary team who makes an important contribution through their health

promotion, prevention, screening, as well as triage, assessment and treatment activities<sup>12</sup>

Physiotherapist's role always rooted in restoring or developing healthy and functional mobility that involved evaluating and

hence strengthening the musculature of the affected area, and also increasing coordination and endurance of the muscle

therefore improving balance and posture. 13

Although WHO recommended the adoption of ICF in practice to better clinical management, solvability and humanization

based on real needs of patients<sup>14</sup> and to aid communication within multidisciplinary team with different experts working

closely to provide an effective patient care and rehabilitation, it is still unknown how many of these health care professionals

are actually implementing it in their daily practice.

Regardless of its relevance that extends beyond clinical practice, and the existence of recommendations by WHO, the

question about its applicability among the Physiotherapist of Arunachal Pradesh in their clinical practice is still lacking.

Therefore this study aims to provide an updated overview of knowledge and understanding the way in which the ICF is

used by Physiotherapists of Arunachal Pradesh.

AIM AND OBJECTIVE OF THE STUDY

Aim of the study:

The aim of the study is to examine the knowledge and usage of ICF in clinical practice by Physiotherapist of Arunachal

Pradesh.

Objective of the Study

1. To determine the percentage of Physiotherapist in Arunachal Pradesh that have knowledge about ICF

2. To find out the applicability of ICF by Physiotherapist of Arunachal Pradesh in their clinical practice.

**METHODOLOGY** 

Study type: Cross-sectional Study

Source of data: Whatsapp groups "Arunachal Physio", "Unemployed Physio" and "IGTAMSU alumni"

Study Setting: Hospitals, clinics that have Physiotherapy service, home care services

Sampling Method: Purposive sampling

Sample Size: 32

# Inclusion criteria:

- A graduate in Physiotherapy
- Physiotherapist into clinical practice

### Exclusion criteria:

- Physiotherapist assistant
- Technician
- Physiotherapist not into clinical practice

### **PROCEDURE**

A survey was conducted through an online questionnaire with multiple choice questions drawn up by the experts in the field to examine the knowledge and use of ICF in clinical practice by Physiotherapist of Arunachal Pradesh. A total of 32 participants from various districts of Arunachal Pradesh were selected considering inclusion and exclusion criteria. The link to the questionnaire was circulated through a social media whatsapp group "Arunachal Physio", "Unemployed physio" and "IGTAMSU alumni" to achieve the greatest number of professionals. When accessing the link, the participants could find information about the purpose of the research, nature of participation, confidentiality, and about the risks and benefits inherent to the research through an informed consent with the questionnaire. The question was made up of nine multiple choice questions and one open ended question regarding professional training and basic knowledge about the ICF. The data relating to the responses were real-time recorded by online software used for the development of the questionnaire.

Descriptive statistics were used for the characterization of the professionals and their answers obtained by the questionnaire. The data were presented as measures of frequency and percentage of the variables with graphs. The results were analyzed using Microsoft Office Excel.

# **RESULTS:**

An online questionnaire was shared through various whatsapp groups to physiotherapiss of Arunachal Pradesh. Of which 32 physiotherapist answered, which amounted for 17.8% of physiotherapists added in whatsapp group of physiotherapists of Arunachal Pradesh.

In this study the maximum participants were having MPT as their highest degree. The characteristics about the formation of the professionals are shown in the Fig 1. We can see that majority of the physiotherapists had specialization (62.5%) in some course.

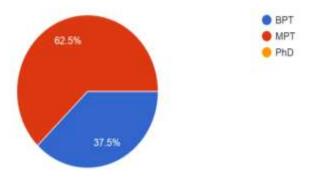


Fig 1. Professional Education Level

Regarding the length of the duration after the graduation (Fig 2), the maximum participants had 2-5 years of formation of degree (37.5%)

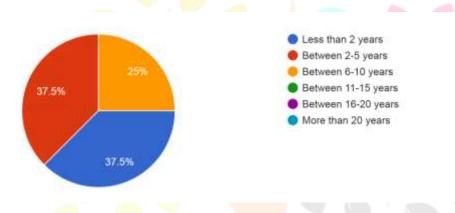


Fig 2. Duration after graduation

From a total response of 32 participants, the result showed that majority of physiotherapists works in University (37.5%) and 25% working in home care (Fig 3)



Fig 3 Professional Practice location

Regarding the knowledge about the ICF, the majority of the physiotherapist (75%) knew about the ICF (Fig 4) and 87.5% (Fig 5) could answer about the acronym of ICF correctly.

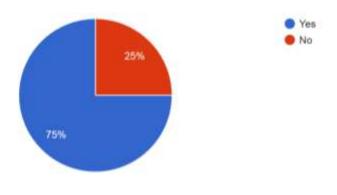


Fig 4. Knowledge about ICF

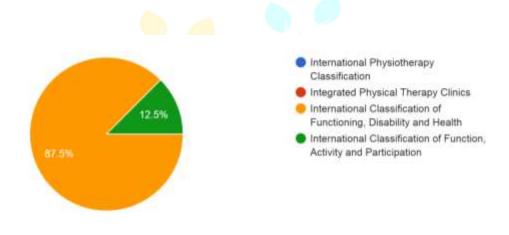


Fig 5. Knowledge about acronym of ICF

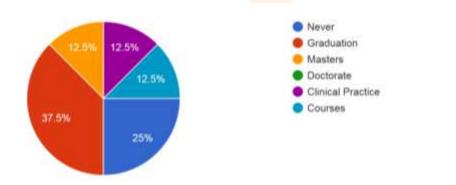


Fig 6. Time of first contact with ICF

According to most participants, the first contact with the ICF happened during undergraduate studies (37.5%) and 25% (Fig. 6) never had a contact with the ICF during their time of study or practice.

Interestingly this study also showed that even with the majority of physiotherapist having knowledge about ICF, the maximum participants do not use the ICF in their practice (75%) and only 12.5% of participants use ICF in teaching and another 12.5% use ICF in clinical practice.

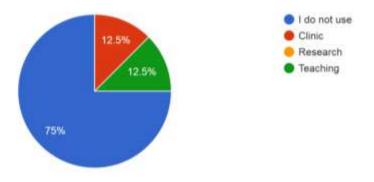


Fig 7. Use of ICF

Regarding the knowledge about the components of ICF, 62.5% (Fig 8.) of physiotherapist got it correct whereas, 37.5% of the total participants did not have knowledge about the right components of the ICF.

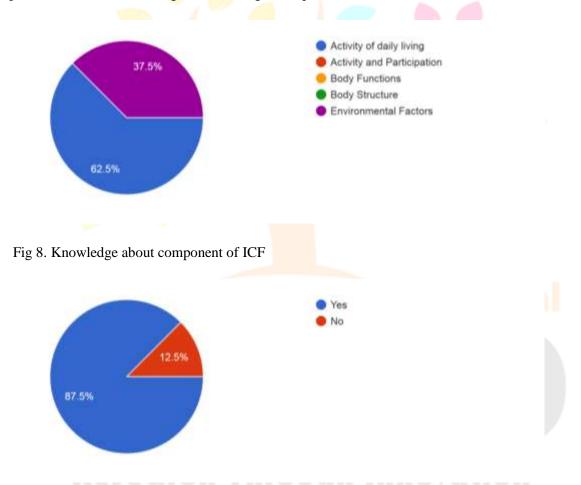


Fig 9. Feasibility of ICF in clinical Practice

The study shows that 87.5% out of 32 physiotherapists thought ICF is feasible to use in clinical practice whereas, 12.5% thought it is not feasible as shown in Fig 9.

The reasons for not being feasible to use could be due to various reasons, it could be because it is new to some of the physiotherapist, some thought it's too lengthy and some did not have the knowledge about the ICF at all.

# **DISCUSSION**

The ICF use is recommended by WHO, as a statistical instrument, research tool, clinical tool, social and pedagogical policy. However, we observe that in Arunachal Pradesh, the majority of the physiotherapists neglected the recommendation by WHO to implement ICF in their clinical practice and decision making. The study also identifies the factors that hamper the adoption of ICF by Physiotherapists by the analysis of the profile and knowledge about the ICF, as well as its practical use by professionals.

The results showed majority of the professional having knowledge about the ICF, but was not using the ICF in their professional life, although they believed its use is possible. These findings corroborate those of a systematic review that demonstrated, despite of how comprehensive and interesting for clinical practice the theoretical context of the ICF is, that little is known about its actual use.<sup>15</sup>

The result of this study demonstrated that 62.5% of professionals have some specialization. Another important fact is that 25% of the professionals of total participants never had a contact with the ICF during their time of study or clinical practice, this may be a result of the following events: professionals who graduated before 2001 and have not sought for further education; or even that those did not sought to improve themselves professionally.

In a study of 587 Canadian occupational therapists, 70% knew about the ICF somehow, 30% of them reported using the ICF in their clinical practices.<sup>15</sup> The literature reports that the ICF use in clinical practice for rehabilitation professionals may be unclear and the significant use of the classification becomes difficult.<sup>16</sup> There is still a great gap between the understanding of the potential applications of the ICF as a whole and its implementation in the clinical settings.<sup>17</sup>

This study showed that most of the Physiotherapist (87.5%) believed that the use of the ICF is feasible in clinical practice but 75% still do not use it in their clinical practice which indicates that may be they choose not to use it and unless an instruction comes up from the health department it is likely that the numbers of physiotherapist who do not use ICF in their clinical practice will remain same or more. A study conducted on the implementation of ICF among Physiotherpist in Israeli rehabilitation centers confimed these results, which showed that the ICF in practice is not used by rehabilitation professionals.<sup>18</sup>

However, the main reasons for the non-implementation of the ICF in the clinical practice are related to the extent and complex nature of this instrument, a problem which is already been recognized by the World Health Organization (WHO).

Professionals tend to have certain inability to integrate ICF into their daily routine due to many reasons like high workload, superficial knowledge of the ICF tool and the need to invest time and money to learn about the ICF and use. 18,19-21 Thus, the expansion of ICF use, the adoption of simple measures such as training toward both academic and rehabilitation professionals 22 time to time and development of simple software or apps for encoding the components of ICF by the professionals in their clinical practice is suggested.

The use of ICF could contribute to many issues related to benefits granting by social security, considered at the time of policy making, and for the pedagogical plans for individual or populations in different health conditions. Therefore, the result of this study suggest all the physiotherapist of Arunachal Pradesh to learn about ICF and apply it in their clinical practice for the benefit of society as a whole and to lead physiotherapy profession to a stronger position within the medical community.

### CONCLUSION

From the above results, the non-use of the ICF by the professionals is justified mainly by the lack of knowledge of the professionals about it and its complexity. To alleviate this problem, the ICF should be included into the undergraduate and postgraduate curriculum as well as time to time training of the professionals. It is also suggested that the individual professionals should update themselves from time to time and use the evidence based skill and knowledge in their clinical practice.

The study has its own limitation as the questionnaire only focused on the usage of the ICF in clinical Practice and no question addressed on how those who already used the tool do it in clinical practice and why considerable number of Professionals do not use it. Thus, future studies are needed to investigate and address this.

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