The Use of the International Classification of Functioning, Disability and Health in Primary Care: Findings of Exploratory Implementation Throughout Life

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ABSTRACT

Purpose: *The International Classification of Functioning (ICF) has found widespread acceptance since it was launched in 2001. Yet, little is known about its use in Primary Care. This paper aims to contribute to the dialogue about the practical use of the ICF by exploring how this framework constitutes a supplementary source to inform disability-related decision making in integrated Primary Care.*

Method: *The implementation process of the ICF in a Latin American Primary Care and Community-Based Rehabilitation setting is described and the ICF diagram is applied to a life story as an example of its current use. Participant observation, in-depth study of reports of team meetings and the review of clinical files are the main data collection methods. Data analysis is enabled by the combination of single-case study with theory testing, which facilitates the generation of hypotheses in this exploratory study.*

Results: *A valuable time component of the ICF may support continuity in Primary Care and the universal application of the ICF framework can promote comprehensiveness by integrating individual rehabilitation and collective disability prevention. A way to mitigate the perceived dominance of biomedical disease and deficiency thinking is proposed in order to encourage the biopsychosocial focus of Primary Care. Finally, the implementation of the International Classification of Diseases (ICD-10) in the health condition domain of the ICF highlights the importance of social responsibility towards disability.*

Conclusion: *This study suggests that a creative implementation of the ICF during life course to everyone who uses universally accessible healthcare may*

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strengthen the integrative functions of Primary Care, and may be at the heart of the information system of this essential part of the healthcare system. Further research on the complementary use of ICF and ICD-10 is suggested in order to support community-based multisectoral intervention which may be coordinated by Primary Care.

Key words: *ICF, Primary Health Care, disability management, integrative functions of Primary Care, life course approach*

INTRODUCTION

The International Classification of Functioning, Disability and Health (ICF), endorsed by the WHO in 2001, has been introduced to describe the functioning of human beings in a comprehensive way and to compare disability situations all over the world. The conceptualisation of disability as a dynamic interaction between any of the dimensions of the person-in-context functioning and environmental and personal factors, one of them being the individual health condition, is innovative. The framework still considers disability as a body and health issue, but it also takes into account the personality and history of the individual, within the social structure and culture in which he/she lives (Bickenbach et al, 1999; Shakespeare, 2012). Nowadays, the ICF is a globally recognised framework which synthesises the biomedical and the social model on disability into one biopsychosocial model (Cieza et al, 2004).

Yet, the ICF is also criticised. Researchers notice the persisting dominance of individual biomedical disease and deficiency thinking, and difficulties regarding the practical implementation of the scheme. Although the guidelines mention that it is about all people, the framework is mainly applied in specialised rehabilitative settings to persons with specific chronic conditions and disabilities (World Health Organisation, 2001; Helander, 2003; Jelsma, 2009; Cerniauskaite et al, 2011; Tempest et al, 2012; Wiegand et al, 2012).

Primary Care would be a research environment conducive to the implementation of the ICF for everyone. This setting constitutes the first contact with the health system for all people throughout life, providing curative and rehabilitative services as well as health promotion and disease and disability prevention at the community level. Working from a biopsychosocial model has also become more common in this context (Engel, 1977; Starfield et al, 2005).

An accurate information system is a vital tool to fulfil these integrative functions,

and the ICF could be part of it (Contandriopoulos et al, 2003; Suter et al, 2009). However, there is little scientific evidence available on its practical implementation in Primary Care, although independent authors and the WHO advocate its use in this part of the health system (Allan et al, 2006; Veitch et al, 2009; Dufour, 2010; Boeckxstaens, 2014).

Objective

This paper aims to contribute to the ongoing dialogue about the practical use of the ICF by exploring its implementation in Primary Care and investigating how this framework may constitute a supplementary source to inform disability-related decision-making in this setting.

METHOD

This study is part of a participatory action research on disability-related demand and supply in community-based health care.

Research Context

Since 1994, a Health and Community-Based Rehabilitation Centre in a Latin American suburb offers comprehensive Primary Care, including health promotion, disease prevention and curative care for local villagers. In response to population demands, rehabilitative services were progressively integrated into the setting from 1997 onwards. Annually, approximately one thousand families are assisted in the health centre and, to date, about 350 persons have made use of the rehabilitation services.

Due to the continuous expansion, the rehabilitation department of the health centre was reorganised in 2009. The interdisciplinary team, consisting of twelve members, participated actively in this process. Daily experience taught them that disability is not only a biomedical issue. They adopted a constructivist approach, understanding disability as a dynamic and relational phenomenon, and opted explicitly for a biopsychosocial conceptualisation of disability which had to be reflected in daily practice (Campbell, 2001; Charmaz, 2006). This led to the introduction of ICF in everyday work.

Data Collection Procedure

Descriptions of the daily use of the ICF in the health centre is based on

systematically recorded participant observations of the first author, on the in-depth study of the reports of team meetings, and on the review of clinical files. No topical questions on the ICF implementation process were developed. Data-collection was guided by initial issues of interest to the authors, mainly related to difficulties experienced in translating theoretical concepts of the ICF such as the biopsychosocial approach and universality, into practice. A preliminary report on the ICF implementation process was elaborated and discussed by the team, providing opportunity to explore its complexities (Lauckner et al, 2012).

To illustrate the current use of the ICF, the life story of L., a young woman with intellectual disability, is presented and her functional status is represented by six ICF diagrams at different significant times in life. Her case was selected because the challenges she was experiencing at the time of the study provided an incentive to apply the ICF framework in a life course perspective. The narrative of her life was reconstructed by means of an in-depth interview with her father. In addition, personal clinical files from the age of 7 up to the present were reviewed. Photographs from childhood until the present day were shown to L., while observing her facial expressions. A synthesis of her life story was presented to her family for refining. Six ICF diagrams that matched each life stage were elaborated and discussed by the rehabilitation team, and new insights on the ICF implementation were challenged by repeated applications of the framework to other life histories.

Methods of Analysis

Memo-writing and reflections initiated preliminary analysis during data-collection. The combination of single-case study with theory testing enabled analysis and the formulation of hypotheses in this exploratory stage of research (Gilson, 2012). Since the opportunities to examine the implementation of the ICF in Primary Care are scarce, learning from this particular experience was possible by comparing the similarities and/or differences in this implementation to the ICF theory as presented in the WHO guidelines. The ICF guidelines foreshadow analytical tools, and the theoretical description of each ICF domain was systematically compared with the practical experience by filling in the boxes of the diagram. The same guide provided other starting points for analysis relating to the universal application of the ICF and the aim of the framework to compare data.

Yet, some authors on case study methodology have indicated that case-specific issues can also emerge as important analytical tools(Stake, 1995; Yin, 2009). In this

case, the explicit use of the arrows of the ICF diagram, indicating relationships between components, was induced by searching for the nature of social responsibility regarding disability. The focus on these graphic elements led to the implementation and analysis of ICF during the life course.

Ethical Considerations

The Committee on Bioethics of the corresponding National Public University granted ethical approval to conduct this research. From the outset, all persons involved were informed about the research goals and procedures. The health centre's authorities provided written permission to use the available information. The father of L., whose life story is presented, gave his verbal consent to make data available, as an explicit call for positive change (Miranda, 2009). Identifying information was removed from the data. Nevertheless, with the possibility that participants may be recognised, the authors of this study call for ethics of care and rely upon inter-researcher trust to behave ethically (Thomson et al, 2005).

RESULTS

A description of the ICF implementation process in the Health Centre and the application of the ICF diagram to L.'s life story are presented here.

Report on the ICF implementation

Team members had agreed that the internal information system should reflect the biopsychosocial conceptualisation of disability and encourage inter-professional communication. The ICF is conceived within such an approach and its diagram was introduced as part of a comprehensive clinical and rehabilitation file, used among persons attending the rehabilitation area for long periods, labelled as "person with disability" (Buntinx, 2010). Yet such pre-assigned categorisation was not always straightforward and it was sometimes unclear whether the label was suitable, e.g., in the case of children with borderline intellectual functioning. In these cases, a comprehensive file with an ICF diagram now is implemented when an interdisciplinary approach is needed.

All team members involved complete one and the same ICF diagram, based on everyone's professional perspective, his/her knowledge about the individual life history and the evaluation of the actual health condition and functioning. No systematic revision of the categories of the formal ICF-browser is applied.

Team members tend to fill out profession-specific boxes, each perspective being complementary. Yet, transdisciplinarity is encouraged and no ICF domain can be left blank.

In the next step, the ICF diagram is discussed at the monthly team meeting. A random team member reads the content of each box from top to bottom. Then, in order to understand the individual's functioning and to determine interventions, the arrows of the model are followed in different senses, relating the environmental and personal factors with the central functioning boxes. Finally, the diagram is used to define an individual action plan, while trying to involve all the boxes.

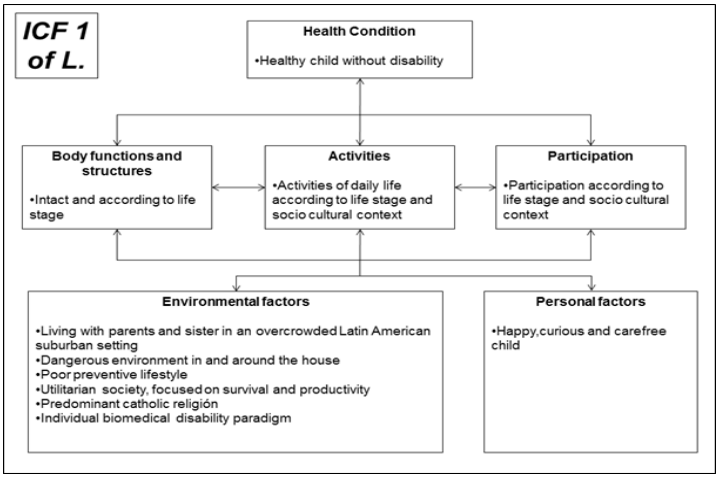
To date, the ICF diagrams of 75 persons have been completed and discussed in this way. Twelve of those diagrams were revised at least once, when important life events changed the (dis)ability situation. This was the case of L. Her life had been turbulent recently, changing her situation in a frenetic way. Her ICF diagram had to be adjusted several times. This experience emphasised the dynamic and interactive nature of disability and provided the incentive for a longitudinal application of the ICF on her entire life story.

L.'s history was reconstructed and an ICF diagram of every life stage was completed, locating every aspect of her story in the corresponding boxes. Then, by asking why and how situations occurred, a trip back in time was undertaken, starting from the actual ICF diagram and following the arrows within and between the diagrams. This retrospective "effect-cause" exercise highlighted some invisible elements of "everyday life", not explicitly mentioned in her narrative but nonetheless strongly influencing her life course. These elements were therefore added to the corresponding boxes.

The story of L.

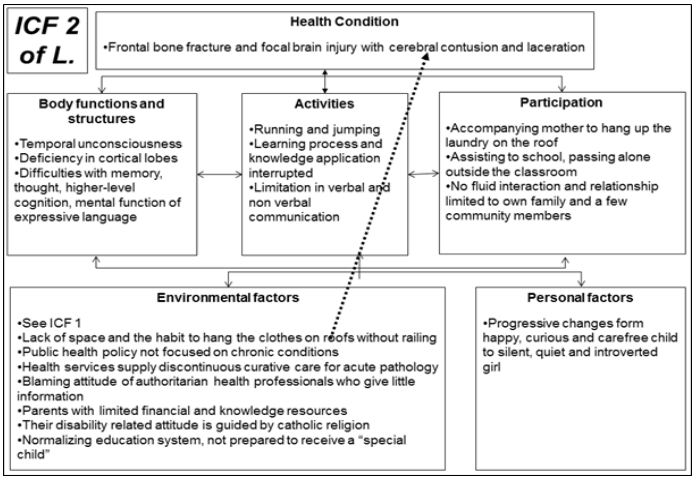
From a "healthy baby"…

When L. was young, she lived with her family in a suburban area of a Latin American city. She was healthy and developed like almost every child of her age, living in the same socio-cultural context.



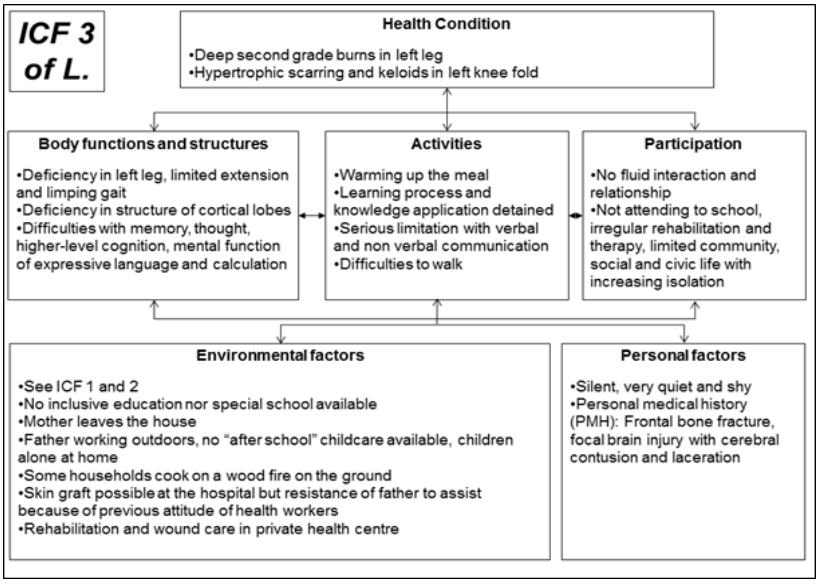
To a "child with intellectual disability"…

As many children do, she accompanied her mother to hang up the laundry to dry on the roof of their house. One day, she ran to the edge of the roof and, as there was no railing, she fell off. She was unconscious. Her father brought her to hospital where a skull fracture and subdural haematoma were diagnosed. Some health workers accused L.'s parents of neglect. After two weeks, the doctors said she could leave the hospital as "she was cured". Little information about consequences of the injuries was given. Rehabilitative follow-up was organized by the hospital but her parents soon stopped therapy as they did not observe any progress. Impairment of executive brain functions persisted. The learning process at school was interrupted as, according to her father, "she didn't benefit from it. She always passed time alone outside of the classroom. The teachers said she was a special child".



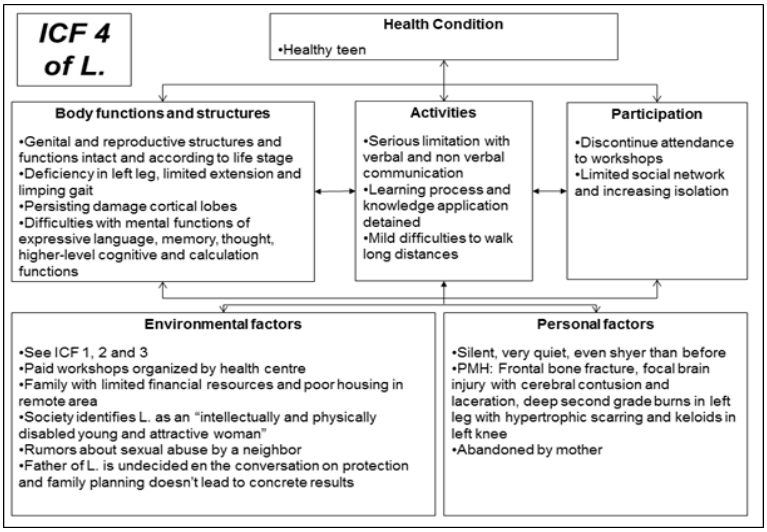
To a "child with intellectual and physical disability"…

L. quit school when she was ten. She received some therapy in the health centre during three years. The marital relationship between her parents got worse and finally her mother left home. Since then, L. has had no contact with her. Her father continued working outside and L. stayed at home with her sister and two younger brothers. One day, while warming up soup on a wood fire, her dress caught fire and her leg was burned. As a result of the previous accusing attitude of some health workers, her father resisted going to the hospital where skin grafts could have been applied. She now presents expanded keloids in the left knee fold, causing limited extension of the leg, and walks with a limp ever since.



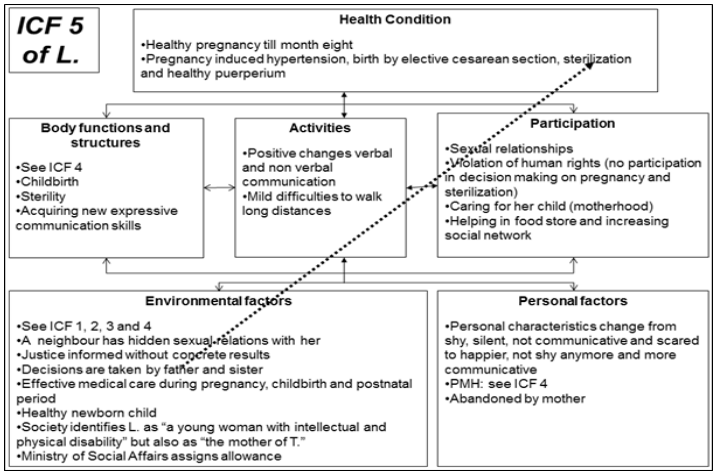
To a "young woman with intellectual and physical disability"…

During adolescence, she participated in occupational workshops. Attendance was irregular because her father could not always bring her or because there was no money to pay the monthly contribution. She was timid, making relationships with other persons limited. Her only two friends were girls with disability. She spent many days alone at home, a poorly constructed house located in a remote area. Her father and siblings had to work or went to school. Her sister had married and was living separately. Her body matured and rumours about sexual abuse reached therapists in the health centre. Remembering previous experiences with other women with disability, a doctor spoke to L.'s father about more protection and the use of contraceptives. However, no real action was undertaken.



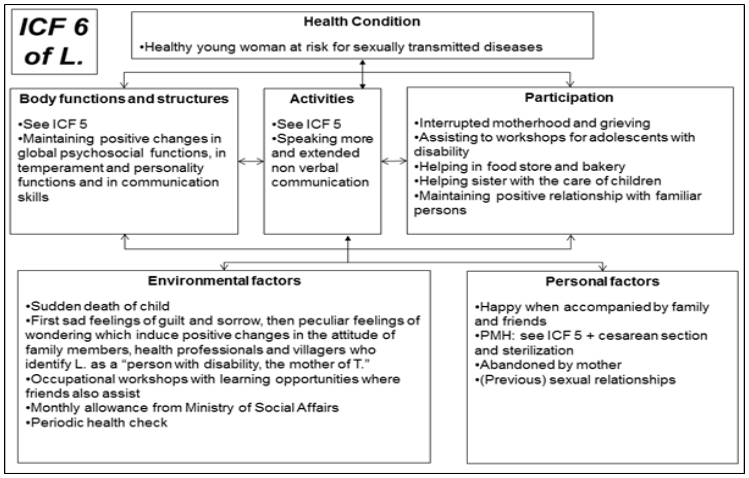
To "L., the mother of T."…

L. became pregnant. The police were informed. A judicial inquest began but has not yet led to any conclusions. Officials from the Ministry of Social Affairs inspected L.'s situation. Her father, who consulted a priest, a lawyer and various doctors, considered abortion and adoption but finally decided that the child would grow up in his own family. Medical care was delivered during pregnancy in the health centre. At first L. was scared. But her sister and the medical doctor explained what was happening and L. became more at ease with the situation. Pregnancy went well without any significant complications until week 37 when blood pressure increased. During elective caesarean section, L. was sterilized without her informed consent but according to the decision of her father. Villagers and health professionals helped with blankets and food. She and her sister were offered a place to work in a store. L. brought her baby with her. Family and friends stimulated her to take care of the child. They considered that she was not just the young woman with disability anymore. She was now "the mother of T." as well. She began to communicate more. She was happier and no longer as timid as before.



To "L., a young woman"...

One cold and rainy night, the baby died. L. cried a lot and many people felt guilty, her father most of all. Many people believed they had failed. Now, L. attends workshops for young people with disabilities. She likes to be with her friends and to help in a local bakery. She rarely stays alone at home and helps her sister with the care of her children. She possibly still has sexual relations and periodic health check is realized in order to detect sexually transmitted diseases. Up to now, she receives a monthly allowance from the Ministry of Social Affairs, which covers some financial requirements. The view on disability of many persons who witnessed this story changed in a positive way. People are amazed about how this life event changed L. and how she has maintained these positive changes despite the death of the child. L. still seems happy, although she misses her baby. And life goes on…



DISCUSSION

Integrative functions of Primary Care, such as continuity, comprehensiveness and biopsychosocial and coordinated care for all people, determined the theoretical framework for organising the results of data analysis.

A valuable time component of the ICF may support continuity in Primary Care

In the first stage of ICF implementation in the health centre, the diagrams were cross-sectional snapshots of (dis)ability situations, and the arrows of the ICF diagrams were only used as point-in-time connectors of the boxes which allowed understanding of the current ecology of the individual's functioning within his/her socio-cultural context (Lebeer and Rijke, 2003).

Yet, when making snapshots past events may be forgotten, such as the fact that L. ever had a baby. The ICF guidelines state that "personal factors may include past life events" (WHO, 2001). However, these past events have to be remembered by an eventually changing team. Continuous care in Primary Health offers the possibility to elaborate on various but not stand-alone ICF diagrams of any life stage, in which the arrows may be used as retrospective connectors of the boxes of each diagram and between each of the diagrams. The use of the ICF as a tool for serial diagnostics may help to reconstruct the individual's functioning and be a means of going back in time so as to understand disability dynamics throughout life.

The arrows may also have a prospective character and guide intervention. Their projection into the future, starting from each box of the current ICF diagram, may address disability in a better way by preventing negative events and facilitating positive processes, converting the ICF into a good starting point for continuous individual action planning. For example, in the case of L., sexual activity may continue and although sterilisation takes away concerns about pregnancy, periodic gynaecological control must be planned in order to detect sexually transmitted diseases (Fig. 6).

Interpreted in this way, the intertwined arrows create a continuum along various ICF diagrams and the boxes are only snapshots on this continuously progressing lifeline, like many beads on different interconnected strings that form a lifelong necklace. This life course approach highlights an inborn time component of the ICF, which helps in understanding and modelling the (dis)ability creating process of each individual (Fougeyrollas and Beauregard, 2001; Priestley, 2003).

The universal application of the ICF can promote comprehensiveness by integrating individual rehabilitation and community-based disability prevention

So far, the use of the ICF in the health centre is limited to a predefined disability context. Yet, completing the ICF until L.'s early childhood, when apparently disability had nothing to do with her, proved to be simple and particularly useful when seeking effect-cause relationships. In the first diagram, representing L.'s childhood without disability, only the environmental box contains specific items. "Ordinary socio-cultural context" could also have been used as this was L.'s common everyday setting, the same context as that of many other children. Nevertheless, this context provided some common and, perhaps precisely for that reason, initially invisible or at least unnoticed disability-creating factors like "no railing on the roof" or "cooking on a wood fire". These examples of a "dangerous environment" and a "poor preventive lifestyle" could affect everyone and were pointed at by following the arrows "back in time" (Fig. 1, Fig. 2, Fig. 3).

The ICF representation of the life course of every community member who attends a universally accessible Primary Care centre may raise awareness about both enabling and disabling determinants for any life stage and for everyone, including the temporally abled persons (Ingstad and Reynolds, 1995; Barnes and Mercer, 2001). This context-specific knowledge may guide local community-based disability prevention programmes, as a result of universally accessible care for persons with and without disability, to all of whom the ICF is applied.

Biomedical disease and deficiency thinking could be weakened in order to strengthen the biopsychosocial focus of the ICF and Primary Care

The ICF aims to describe disability situations within a biopsychosocial model "that attempts to achieve a synthesis of two opposing models: the medical and the social model" (WHO, 2001). The use of this integrating model could highlight the person-in-context perspective of (dis)ability in Primary Care. However, the analysis of the existing ICF diagrams points to a persisting dominance of individual biomedical disease and deficiency thinking.

For the classification of health conditions, the ICF browser does not have its own system. The guidelines encourage users to apply the International Classification of Diseases (ICD-10) in a complementary way (WHO, 2001). This is followed in the health centre. Yet, when filling in this box, some overlap with the body structures and functions box is observed, with the health conditions being more specific,

e.g., in L.'s case "focal brain injury with cerebral contusion and laceration" and "deficiency in cortical lobes" (Fig. 2), or "deep second-degree burns in left leg" and "deficiency in left leg" (Fig. 3). The WHO (2001) recognises that "body functions and structures may be part of or an expression of a health condition", so the overlaps emphasise unnecessary biomedical aspects of disability.

ICF guidelines also indicate that "each component of the diagram can be expressed in both positive and negative terms" (WHO, 2001). Yet, as a "classification of disease and health related problems", the ICD-10 defines health conditions as "diseases, disorders, injuries or trauma" and does not include "healthy" conditions (WHO, 1992). It could be argued that previously acquired and continuing negative health conditions make any completely healthy state impossible in the future. However, ordinary but important healthy situations then are possibly overlooked. For example, at the onset of L.'s life, she was a healthy child without disability. The fact that she was a curious child, who did not know the danger of a roof without railings or of a wood fire on the ground, did not draw attention in real life (Fig. 1, Fig. 2). The case also proves that "healthy teen", implying a young attractive body, must not be overlooked (Fig. 4). The awareness of these healthy situations and their relationship with certain socio-cultural factors could have prevented many sad events in the life of L. Yet, behaviour and development are only included in the ICD-10 when disorders exist, which fosters deficiency thinking as if common healthy situations do not need attention and intervention.

In the health centre, specific healthy states are nowadays included in the health condition box, as a result of various trips back-in-time in search of understanding individual (dis)ability- creating processes. In this Primary Care setting in which an interdisciplinary team completes one shared ICF diagram per person, physicians as well as any team member can add information about healthy states to the health condition box. The body structures and functions box of the diagram mainly includes body functions, as the description of health conditions by the ICD-10 already clarifies which body structures are involved.

In this way, the three central boxes of the ICF diagram constitute a pure functioning axis, which represents in a non-linear and totally invertible way the complete range of human functioning of any complexity, distinguished from but influenced by and influencing a wide range of interrelated personal and environmental conditions. This change allows the attention to focus again on the central idea of the ICF: to describe the functioning of human beings from a biopsychosocial perspective. It also highlights the dynamic condition of (dis)

ability, disease and health, and supports the movement from the present static formulation of health towards a more dynamic one, related to the capacity to cope and the ability to adapt (Huber et al, 2011).

The use of ICD-10 in the health condition domain provides the opportunity to highlight the importance of social responsibility and may encourage multisectoral interventions

In the health centre, the arrows of the ICF diagram are explicitly used to understand the person-in-context perspective of disability. In L.'s case, nearly all the activities and participation items involve environmental factors. For example, "not attending school" relates to "no inclusive education or special school available". "Warming up the meal" implies a "wood fire on the ground", and "sexual relationships" imply the presence of "another person". These interactions are conceptualised by the arrows which connect the environmental factors with the central functioning axis of the diagrams (Fig. 3, Fig. 5).

This person-in-context perspective is also represented by arrows which connect environmental factors in a direct way with the individual's personal factors. In L.'s case, the neighbour chose her rather than another person because she was timid and shy. Her personality, characteristics to be filled out in the personal factor box, determined the choice, and the straight relationship of these characteristics with the environment is clearly represented by a direct link which does not pass through the functioning axis (Fig. 5).

Direct links between the individual's functioning and environmental factors, and between environmental factors and personal factors clearly exist in the formal ICF diagram. However, a direct link between the environment and L.'s health condition is not shown, giving the impression that every relationship between environmental factors and the individual health condition passes through the functioning axis. At first sight, it seems that the health condition, which "provides an etiological framework for functioning and disability", is at the same time the result of this functioning, suggesting total individual responsibility for and ownership of the personal health condition (WHO, 2001).

However, in reality the health condition may be affected directly by external factors, as many situations happen in a passive involuntary way. L. had an accident with a resultant brain injury because of a culturally and environmentally defined poor preventive lifestyle with accessible roofs without railings. Further, after childbirth she was sterilized because her father was afraid she would have

another pregnancy. Other examples of facts that only happen to people are congenital toxoplasmosis caused by the Toxoplasma Gondi parasite that affects the brain of unborn babies, shaken baby syndrome and infected pressure ulcers which led to the death of an unattended tetraparetic boy.

In all these passively experienced life events, the link between the individual and his/her environment is clear, but the functioning axis is not the personal connection point. In these cases, team members add a direct link between the environmental factors box and the health condition box (dotted lines in Figs. 2 and 5). The WHO incentive to use ICD-10 when filling out the health condition endorses this completely. In fact, this classification contains various chapters which identify "external" causes of morbidity and mortality, such as accidents or assaults, complications of medical care and birth trauma. In these cases, the individual health condition is not the result of the individual functioning but a direct consequence of those external factors. Many of them relate to, or certainly overlap with, elements from the environmental factors in the ICF, as for example, "sequelae of transport accidents" (Y85 in ICD-10) and "general products and technology for mobility and transportation" (E1200 in ICF), or "sexual assault by bodily force" (Y05 in ICD-10) and "individual attitudes of community members that influence behaviour and actions" (E415 in ICF).

Making explicit this direct link helps to identify public measures that can minimise or prevent the negative effect of external causes of morbidity when individual functioning fails, and may encourage multisectoral intervention coordinated by Primary Care. Meanwhile, the Health Centre has launched a campaign in order to prevent more falls from roofs, and local bricklayers now often build parapets on the roofs.

Limitations

Generalisability of the findings may be questioned because of the singularity of the case and the first author's involvement in the research context could have induced researcher bias. However, the particularities of the research setting and the life story constitute a good opportunity to explore the practical implementation of ICF. And possible bias was mitigated by long-term involvement and sharing/forwarding the preliminary descriptions with the team. Member checking was also applied to the ICF frames and data analysis. Case contextualisation and the triangulation of data collection methods underpin research validity. All findings are challenged up to date in the daily practice of the setting. This co-construction

of reality integrates multiple perspectives and is consistent with the constructive research paradigm.

CONCLUSION

The aim of this study was to contribute to the ongoing dialogue about the practical use of the ICF. A particular life story induced the analysis of exploratory implementation of the ICF framework, which in turn entailed the ethical responsibility to allocate primary health care responsibility, to identify social action and to clarify roles. Findings indicate that the ICF may support some integrative functions of Primary Care and constitute a primary source to inform disability-related decision making, provided that there is sufficient depth of information- seeking along with interprofessional help from a client's perspective and with attention to the links between all ICF domains. The ICF may thus help to create awareness of the real underlying needs of the client and the family, and to define, interprofessionally, an appropriate answer. These results may be a step towards an answer to the call of L.'s father for positive changes.

Highlighting the time component of the ICF may encourage continuity of care across the lifespan, delivered by an eventually changing interdisciplinary team. The result of projecting arrows into the future on the prevention of adverse situations can be a fascinating research topic.

The universal implementation of the ICF may strengthen comprehensive care by linking person-focussed rehabilitation to population-oriented disability prevention. This underpins the view that it is not about to be or not to be a person with disability when applying the ICF and the WHO rightly calls for its universal application. How to broaden the use of the ICF from a limited application of persons with chronic conditions in rehabilitation contexts to a universal application, should be explored.

This study confirms that biomedical disease and deficiency thinking remains dominant in the ICF, at the expense of the visualisation of common environmental factors and healthy conditions which also influence (dis)ability creating processes. As stated in literature, further research must address the joint use of the ICF and the ICD-10 (Kohler et al, 2012). The removal of body structures from the functioning axis, and ways to raise awareness of "healthy conditions" may be explored in order to strengthen the biopsychosocial comprehensiveness of both the ICF and Primary Care.

Finally, making the direct link between health condition and environmental factors explicit by means of the ICD-10 may initiate multisectoral interventions which can help to prevent undesirable situations when self-functioning fails. The relationship between the external causes of morbidity mentioned in ICD-10 and the environmental factors of the ICF may be another research topic.

Although it is too early to generalise the research findings, the combination of single-case study with theory testing proves to be useful for generating hypotheses and propositions on the use of the ICF in Primary Care. This study suggests that the ICF may strengthen integrated Primary Care by implementing the framework in a creative way to everyone who uses universally accessible health care. By focussing the attention on the arrows as functional graphic elements of the diagram, the ICF proves to be useful for serial diagnostics and the scheme may be at the heart of the information system of Primary Care.

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