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ICD-10 implementation in the health information system of the Piedmont Region (Italy) to overcome WHO multiaxial classification of mental disorders of children

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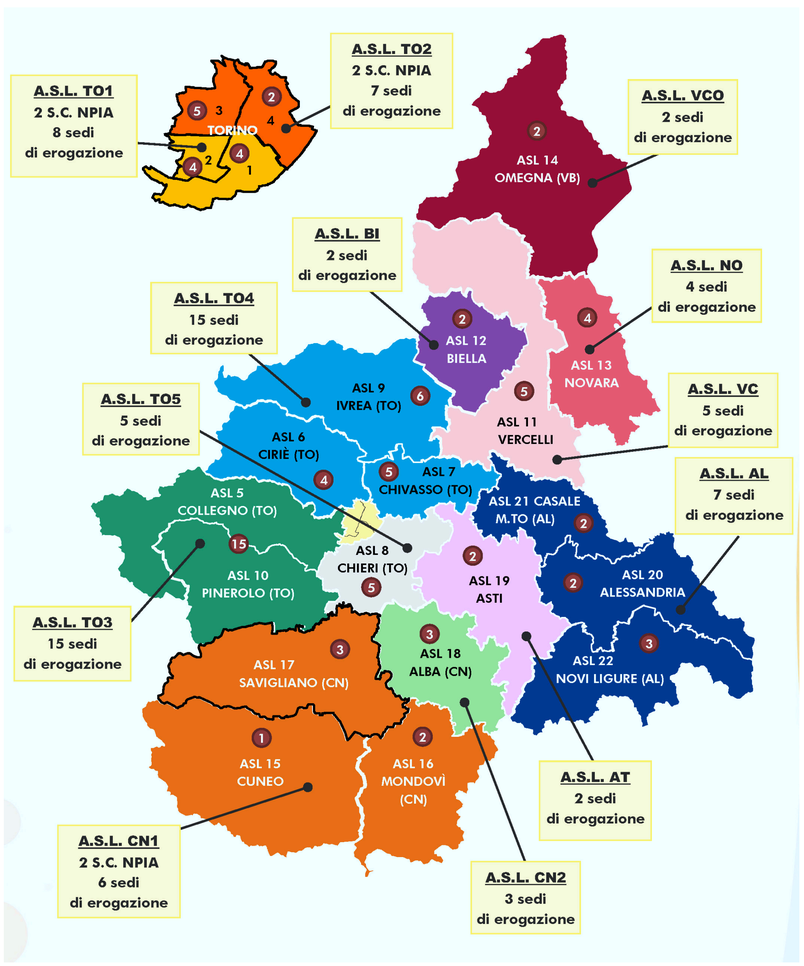
Abstract This poster presents the activities carried out by the Italian WHO-FIC CC to implement the full use of ICD-10 in the Piedmont region (Italy), where the derived Multiaxial Classification (MC) of Child and Adolescent Psychiatric Disorders is used for epidemiologic purposes in the NPI.net, the regional information system collecting data from child/adolescent neuropsychiatry services.

Introduction

Although ICD-10 is not mandatory for morbidity coding in Italy, Italian scientific societies have adopted the derived Multiaxial Classification (MC) of Child and Adolescent Psychiatric Disorders as a diagnostic tool (1).
This has led to two misconceptions on ICD-10: ICD-10 is only a diagnostic tool and is limited to the categories of the MC (chapter V, some codes of chapter XXI, few codes from other Chapters).
This paper presents the activities carried out by the Italian WHO-FIC CC to implement the full use of ICD-10 in the Piedmont region (Italy), where MC is used for epidemiologic purposes in the NPI.net, the regional information system collecting data from child/adolescent neuropsychiatry services.

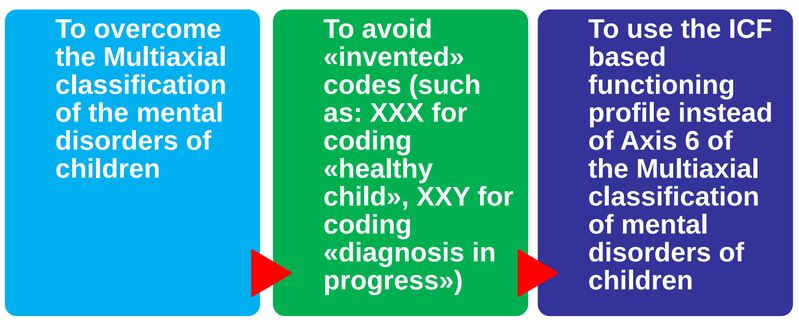
Figure 1: The local health authorities in Piedmont region



Methods & Materials

By formal agreement, the Italian WHO-FIC CC provided the Piedmont region with support in the training of professionals and in the revision of NPI.net. The training aims were: (i) to overcome the use of the MC; (ii) to avoid the use of codes invented to fill the gaps of the MC in the clinical practice; (iii) to replace the sixth axis of the MC with an ICF profile. The first ICD-10 training (14 hours, two consecutive days) was for a restricted group of health services directors (N=30) and was held in November 2012 in Turin. The second ICD-10 training course (14 hours, two consecutive days) was held in May 2013 for 90 health professionals (psychiatrists, neurologists, and psychologists).

Figure 2: Three operational aims of the training programme



Results

New education materials were developed, including three sets of coding exercises, tailored to the requirements of child/adolescent neurologists, psychiatrists, psychologists and rehabilitation operators; coding errors due to the outdated and approximate translation of the MC were addressed; wrong coding habits were corrected; and codes invented for conditions not present in the ICD-10 Tabular List as such were avoided by appropriate use of the ICD-10 Index.
The distinction between the diagnosis and the coding of a health condition was made clear training was performed on the of the three decision trees designed by the Italian Collaborating centre.(2)
At the end of the course, trainees were seamlessly switching from the use of the outdated MC to the use of the full ICD-10.

Figure 3: Use of Diagnostic categories, in the NPI.net database (pre-training analysis, ASL 12 only)

The 11 most frequent codes cover 50% of coded conditions

The most frequent code is 'XXY', «Diagnosis in progress»

Diagnostic categories		N.	%	% CUM.
XXY	Diagnosis in progress	511	19%	19%
F70	Mild mental retardation	176	6%	25%
G44	Other specified headache syndromes [. . .]	126	5%	30%
QXX	Borderline cognitive capacity (I. Q. 70-84)	84	3%	33%
Z60.1	Atypical parenting situation	77	3%	36%
F80.1	Expressive language disorder	70	3%	39%
XXX	Healthy	66	2%	41%
F81.0	Specific reading disorder	61	2%	43%
F81	Specific developmental disorders of scholastic skills	54	2%	45%
F81.3	Mixed disorder of scholastic skills	53	2%	47%
Z63.8	Other specified problems related to primary support group	52	2%	49%
All the rest		1345	50%	99%
Not determined		33	1%	100%
Total		2708	100%	

Figure 4: The first ICD-10 class (including the three trainers/authors) on November 2012

Conclusions

An appropriate use of ICD-10 allows users to keep the classification as a diagnostic tool and to fully code all conditions and reasons for encountering health services.
The Italian translation of the WHO ICD-10 training tool is highly encouraged, although specific users needs should be considered.
In the framework of the Italian WHO-FIC CC/ Piedmont region collaboration, a web application (FABER) will be implemented for an ICF-based evaluation of functioning, formerly described using the sixth axis of the MC (3).
Although limited to the Piedmont region, the experience has national relevance as it is the first implementation of ICD-10 in a morbidity setting.

Figure 5: The second ICD-10 class on May 2013

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References

1. WHO. Classificazione multiassiale dei disturbi psichiatrici del bambino e dell'adolescente, Masson 1996
2. Frattura L, Gongolo F, Munari F. Identification and coding of the main condition using ICD: suggested workflows. WHO-FIC annual meeting, Beijing 2013
3. Frattura L. et al, The FBE development project: toward flexible electronic standards-based bio-psycho-social individual records, in Proceedings XXIV Conference of the European Federation for Medical Informatics, Pisa, Italy 2012
4. Frattura L. et al, Health information systems learn to speak ICF: Toward electronic ICF-based individual records, Who-FIC Network Annual Meeting, Cape Town 2011

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