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Training on intellectual disability in health sciences: the European perspective

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Abstract

Background—Intellectual disability (ID) has consequences at all stages of life, requires high service provision and leads to high health and societal costs. However, ID is largely disregarded as a health issue by national and international organisations, as are training in ID and in the health aspects of ID at every level of the education system.

Specific aim—This paper aims to (1) update the current information about availability of training and education in ID and related health issues in Europe with a particular focus in mental health; and (2) to identify opportunities arising from the initial process of educational harmonization in Europe to include ID contents in health sciences curricula and professional training.

Method—We carried out a systematic search of scientific databases and websites, as well as policy and research reports from the European Commission, European Council and WHO.

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Contributors LSC designed this study. RM and CH made the literature search and coordinated the data collection. All authors contributed to the data collection and the review of the manuscript.

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Ethics approval This project is limited to the collection of publicly available information on the research topic. No ethical authorisation was required as it does not include information on individuals.

Furthermore, we contacted key international organisations related to health education and/or ID in Europe, as well as other regional institutions.

Results—ID modules and contents are minimal in the revised health sciences curricula and publications on ID training in Europe are equally scarce. European countries report few undergraduate and graduate training modules in ID, even in key specialties such as paediatrics. Within the health sector, ID programmes focus mainly on psychiatry and psychology.

Conclusion—The poor availability of ID training in health sciences is a matter of concern. However, the current European policy on training provides an opportunity to promote ID in the curricula of programmes at all levels. This strategy should address all professionals working in ID and it should increase the focus on ID relative to other developmental disorders at all stages of life.

Keywords

health education; health training; intellectual disability; mental health; Europe

Introduction

Intellectual disability, formerly defined as ‘mental retardation’ is a cluster of syndromes and disorders characterised by low intelligence and associated limitations in adaptive behaviour (Salvador-Carulla and Bertelli 2008; Salvador-Carulla *et al.* 2011). Over 4.2 million people have ID in Europe with a total estimated cost of €43.3 billion each year (Westerinen *et al.* 2007; Olesen *et al.* 2011; Wittchen *et al.* 2011). The interface between mental, physical, and social aspects is highly complex in ID, making its diagnosis more difficult than other health conditions and hindering care provision.

Persons with ID as a group show a disparity of health profiles compared with the general population. They report increased morbidity, poorer health status and a reduced participation in health promotion activities, as well as higher rates of obesity and mental health disorders, and lower rates of cardiovascular fitness, vaccination levels, and preventive health screenings (Martínez-Leal *et al.* 2011).

Despite the fact that ID has consequences at all stages of life, requires high service provision and leads to high health and societal costs, it has been underrepresented in health care and health research. Furthermore, in most countries a large divide exists between availability of services and the health needs of persons with intellectual disability (Salvador-Carulla and Saxena 2009).

To make matters worse mounting evidence suggests that in addition to the lack of information, many students and health professionals experience negative attitudes and perceptions toward the work with persons with intellectual disabilities (Ouellette-Kuntz *et al.* 2003; Sullivan *et al.* 2011; Rose *et al.* 2012; Werner and Stawski 2012). In other cases, while professionals were willing to treat people with an ID, they were not willing to spend more time or to complete additional training necessary to effectively treat persons with ID (Gill *et al.* 2002). Different studies conclude that it is necessary to change curricular

standards in health sciences and to increase training in order to potentially overcome negative attitudes and perceptions regarding ID.

Thus, though the need for specific training in this specialist subject is great, ID is largely disregarded as a health issue by national and international organisations, as are training in ID and in the health aspects of ID at every level of the clinical education system (undergraduate, graduate and professional lifelong learning).

Today, the need for comprehensive information on ID training initiatives, policies and implementation is particularly relevant in Europe due to the recent rising of harmonization opportunities in education such as the Bologna strategy on training, and increased mobility and accreditation within the borders of the European Union. These processes could influence at different paces both undergraduate and graduate training, as well as lifelong training in formal and non-formal settings.

This paper aims to update the current information about the availability of training and education in ID and related health issues in Europe with a particular focus in mental health (MH) and to identify opportunities arising from the initial processes of educational harmonization in Europe to include ID contents in health sciences curricula and professional training.

Method

This comprehensive review is related to two European projects where training issues on ID in Europe have been assessed. POMONA is a project aimed at developing indicators for health policy in Intellectual Disabilities funded by the Executive Agency of Health and Consumer (EAHC) (www.pomonaproject.org). TRINNODD is an education project, funded by Leonardo Da Vinci programme, aimed at developing training modules on mental health and ID for frontline ID professionals in Europe (<http://www.trinnodd.eu/>).

First, a review of current ID education and training studies in the health sciences (mainly medicine, with a special focus on psychiatry, psychology, nursing and occupational therapy) was carried out by an expert group. It included a review of the scientific literature during the last 22 years (1990–2012), using Embase, Medline, Cochrane, PsycInfo, Science Direct and Google scholar databases (keywords were ‘learning disability’, ‘intellectual disability’, ‘mental retardation’, ‘developmental disability’, ‘mental handicap’ AND ‘training’, ‘education’). In total, 114 articles that met all criteria were found. These articles, together with policy documents and information from key organizations in the field, were used as the basis for a review of the development and availability of intellectual disability training for health professionals in Europe.

Only articles published after 1990 and based in Europe were included. After a careful review of the titles and the abstracts the search in scientific databases produced 35 references directly related to this topic. We also searched pertinent official documents and research reports produced by international organisations (European Commission, European Council and WHO). Furthermore, specific information on this issue was gathered from key international organisations, including the World Health Organization (WHO) and its

European regional Office (WHO-EURO); the World Federation for Medical Education (WFME); the World Psychiatric Association (WPA) and the WPA Section 'Psychiatry of Intellectual Disability'; the European Society for Children and Adolescent Psychiatry (ESCAP); the European Union of Medical Specialists (UEMS) and its section on Child and Adolescent Psychiatry (UEMS-CAP); the European Federation of Psychiatric Trainees (EFPT); the International Council of Nurses (ICN); the European Federation of Psychologists' Associations (EFPA); and Mental Health Europe (MHE). Other organisations directly related to the ID field included the European Association Mental Health in Intellectual Disability (EAMH-ID); the European section of the International Association of Scientific Research in Intellectual Disability (IASSID); and the European Association of Intellectual Disability Medicine (former MAMH). This information gathering consisted of web and document-based searches plus e-mail and personal contacts. To complete this report the Royal College of Psychiatrists; the Royal College of General Practitioners (RCGP) were also contacted. The Montreal PAHO/WHO Collaborating Centre for Research and Training in Mental Health was contacted given that it coordinated the WHO Atlas on ID Resources in the World 2007 which identified the visibility problem and the global gaps of ID care including the European region.

The first section of this review summarises the available education and training studies on ID in Europe and the official documents and research reports produced by relevant organisations. The second section reviews the trends in undergraduate training with regard to ID in the health sciences. The third part focuses on graduate and lifelong training of health professionals and other types of training, including non-formal training and non-professional training. General aspects of the harmonization process and the opportunities arising for ID education and training in Europe are discussed in the fourth section. We conclude with a discussion about the current availability of training and education on ID in Europe and we propose further actions to increase European educational harmonization in this topic.

Results

Scientific studies about ID professional training and education in Europe

Studies about training and educational issues related to ID are scarce in Europe in comparison with other territories such as North America or Australia. Only 35 relevant studies were found (see Table 1). Training in general health nursing issues related to ID and training in mental health and ID issues accounted for 10 studies each. Five studies covered general training in ID for direct attention staff in order to develop specific abilities or for better service implementation. Three studies dealt with dentistry training issues in dental education for the care of ID population, one with primary care issues and ID, one with ID and sexuality education, one with ID training with undergraduate students and another one with mental health nursing and ID. Two of the studies were aimed at developing educational and training policies related to service provision for persons with ID. Finally the last study reviewed a range of contemporary literature relating to education in learning disability health and social care in which four themes were identified: training social carers, user involvement, (inter) professional practice and work-based learning.

Graduate and lifelong training of health professionals

The WHO Atlas on global resources for persons with ID reports on several graduate ID training modules that were available or incorporated into curricula at the country level (WHO 2007). Again, when such a curriculum existed at the graduate level, it was most commonly offered to psychiatrists (52.7% of countries reported graduate training for this group), special educators (52.1%) and psychologists (46.6%). Reports of graduate training modules were lower in social workers (34.2%), speech and language therapists (32.9%), paediatricians (31.5%), general medicine practitioners (29.5%) and nurses (24.7%). Even lower rates were reported in physiotherapists (21.2%) and occupational therapists (20.5%). Primary health-care workers were identified as having the fewest opportunities to train in ID (15.1%). The percentage of countries in Europe reporting specific training in ID was as follows: special educators (59.6%), speech and language therapists (44.7%), psychiatrists (46.8%), psychologists (38.3%), and paediatricians (21.3%). Programmes addressed to other professional groups were reported by less than 20% of the European countries.

In-service training to maintain standards of care and practice offered to professionals who work with persons with ID were reported mainly for special educators (76.0%), psychologists (61.0%), and psychiatrists (56.2%). Thus, professionals who were most involved with persons with ID were those most likely to be offered in-service training.

WHO-EURO launched a specific programme on ID and related mental health in 2008, primarily focused on care reform in South-eastern European countries. However, training and educational aspects of this initiative have not been developed yet.

The World Psychiatric Association (WPA) has developed the '*Institutional Programme on the Core Training Curriculum for Psychiatry*' (WPA 2002), which is also described in the Atlas of psychiatric education and training across the world (WHO 2005). The main educational aim was to build the core elements of a training curriculum in psychiatry so as to create competent psychiatrists who will ensure the highest quality of psychiatric services.

The '*Core Training Curriculum for Psychiatry*' has two educational components: (1) the 'Didactic Curriculum', in which ID is not specifically mentioned but could be considered a transversal issue, and (2) the 'Didactic/Clinical Rotations', in which ID is offered within the minimum number of suggested seminar topics for a length of 4–6 hours during the second and third years and also within the 'Recommendations' (details of this programme are available online at: <http://www.wpanet.org>).

Apart from the Institutional Programmes, WPA has promoted education and training courses through its scientific conferences, educational and training material as well as through the 'Psychiatry of Intellectual Disabilities.' Training packages include general guidelines on ID, mental health and ID, and autism, whilst the training programme has recently incorporated guidelines on pharmacological treatment for ID (Deb *et al.* 2009).

Since 1997, the European Union of Medical Specialists (UEMS) has been involved in the development of postgraduate specialist trainings within each medical speciality in order to encourage the implementation of uniform training in Europe as a whole (UEMS 1997). '*The*

Charter on Training of Medical Specialists in the European Community, adopted in 1993, was the framework 'for this harmonisation. In Psychiatry, this application was established in the *'Requirements for the specialty of Psychiatry'* (approved in 1998 and revised later in 2003) (UEMS 2003).

During 2004, UEMS carried out a survey of training in psychiatry in Europe that aimed to get feedback on the implementation of the *Requirements for the Psychiatric Speciality*. The results showed that generic disability ('learning difficulties') and ID ('mental handicaps') were components of the mandatory practical training (common trunk areas) in only five and six countries respectively. As a comparison, psychotherapy was mandatory in 18 countries, community psychiatry in 19, and old-age psychiatry in 14. This fact suggests that ID was not a key issue in national psychiatric programmes in Europe. As for sub-specializations, the survey indicated that ID was only recognised as a sub-speciality in two countries, while were sub-specialities in eight and five countries respectively. Child and Adolescent Psychiatry was established as a separate Section and Board from 1993. The results gave an overview about the practice of training in psychiatry in many European countries, but as only two-thirds of the countries included (22 out of 31) filled out the survey, therefore the results should be regarded with caution. The report declared that 'some areas like mental handicaps, leaderships, administration, management and economics, medical informatics and telemedicine should be introduced into the training curriculum' (Lotz-Rambaldi *et al.* 2008).

The European Society for Children and Adolescent Psychiatry (ESCAP) has shown a long-standing interest in the development of a core curriculum in child and adolescent psychiatry in Europe (Hodes 1998). It cooperates with the UEMS Section on Child and Adolescent Psychiatry (UEMS-CAP) in the development of a core curriculum in child and adolescent psychiatry (Karabekiroglu *et al.* 2006). EFPT is another European body that manages the harmonization of psychiatric training across Europe (Schulze and Treichel 2002).

It is important to mention the contribution of several British institutions, such as the Royal College of Psychiatrists, the Estia Centre, the Tizard Centre and the Mencap, in the development and implementation of training programmes in other European countries. The contribution of these centers to the development of the field in Greece, Italy and Spain has been substantial. A seminal project coordinated from Estia Centre was the Merope project. The Merope project (BIOMED-II: 'Standardising criteria for Mental Health Assessment in adults with mental retardation: a European perspective' –1998/2001) (Holt *et al.* 2000) included a specific working package on training in MH-ID. This training module was implemented in Greece (Tsiantis *et al.* 2004) and was used to develop specific training packages in Spain in cooperation with the Spanish Society of Professionals on ID (AEECRM). The POMONA training package was also used as a core document for developing the training module of the TRIADD project, a European training programme for staff who work directly with individuals with both intellectual disability and mental health problems. This programme included training modules, bibliographical sources and psychodiagnostic tools. The main areas of its training modules were general concepts, major mental health problems, treatment and medication, treatment and therapy and services (see http://www.triadd.lu/resources/resources_index.htm). This Leonardo da Vinci project has

now been expanded to several countries in Southern and Eastern Europe (TRINNODD project) (<http://www.trinnodd.eu/>). Congresses organised by the major European societies in the field, such as the European Association of Mental Health in Intellectual Disability, IASSID-Europe and European Association of Intellectual Disability Medicine, are the major sources of graduate and lifelong training for European health professionals to date.

Current trends of undergraduate training in ID and related MH

There are few international initiatives with regard to undergraduate training in ID and MH-ID. The WHO Atlas includes general information on undergraduate training modules on ID, although the information provided is too broad to draw any conclusions and varies in reliability from country to country (WHO 2007). Country focal points reported undergraduate training modules in psychiatry in 37.7% of the countries surveyed. Reports of training modules in general medicine and paediatrics were slightly lower (35.6% and 32.2% respectively). Similar rates to psychiatry were reported for nursing (39.7%) and for psychology (39.0%). The country focal experts reported lower rates of undergraduate training modules for other professionals within the health sector (physiotherapists: 31.5%; speech and language therapists: 30.8%; occupational therapists: 28.8%; primary health care workers: 21.9%). In any case, the majority of countries do not report any undergraduate ID training for health professionals. The highest report of training modules appears in special education (51.4%) and social work (37.0%). Although they give no specific data on MH-ID, the reports on psychiatry and psychology may provide a proxy measure of the level of training on this topic worldwide.

While these results varied largely across different countries, less than half of the European respondents reported incorporating undergraduate ID training modules into a curriculum within their country. When such a curriculum did exist at the undergraduate level, it was most commonly offered to special educators (in 51.1% of the European countries), physicians-psychiatrists (46.8%), speech and language therapists (46.8%), physiotherapists (38.3%), nurses (36.2%), psychologists (34.0%), social worker (34.0%), occupational therapist (34.0%), and primary health-care workers (25.5%).

The World Psychiatric Association has developed specific programmes for undergraduate training (Core Curriculum in Psychiatry for Medical Students) (<http://www.wpanet.org>), both of which are relevant to the European case. The undergraduate training programme was developed in collaboration with the World Federation for Medical Education and the World Health Organization (WPA 1998). It is aimed at closing the gap between psychiatry and the rest of medicine and at promoting a better understanding of mental illness (Saraceno and Dua 2009). Focusing on attitudes, knowledge, and skills, this Curriculum suggests a minimum psychiatric knowledge base that every doctor in the world should obtain (WPA 1998). Within the core curriculum ID is defined as a syndromic entity structured in three basic parts: prevention, recognizing more frequent syndromes, and treatment.

In 2001, the European Federation of Psychologists' Associations (EFPA) approved the 'Framework for education and training for Psychologists in Europe.' This founding document constitutes the basis for a two-level diploma system that encompasses both the European Diploma in Psychology (EuroPsy) and a number of Advanced European Diplomas

in the field. In 2006, EFPA released the 'Declaration on the European Standards of education and training in professional psychology – EuroPsy.' In 2008, EFPA launched the EuroPsy certification and registration process in all 32 Member countries. EFPA will also present the EuroPsy model to all EU Member States and other governmental competent authorities for acceptance as an automatic instrument for the recognition of professional qualifications in psychology between European countries.

Currently, the equivalence of academic qualifications is evaluated by National Academic Recognition Information Centres (NARIC) at the national level and by the European Network of Information Centres (ENIC) at the European level (<http://www.efpa.eu/europsy/preamble>). Although the documents released by EFPA have not introduced ID as a specific topic and do not provide a description of the curriculum content, Developmental Psychology is mentioned as a key topic in the first phase of training (EFPA 2006).

Nursing is one of the nine areas that has developed reference points for making programmes which can be compared in the framework of the '*Tuning Educational Structures Project*'. Funded by the European Commission in the previous Socrates and Tempus Programmes, this experience looks for increasing cooperation among countries in the Higher Education Sector and links directly to the political objectives set in the Bologna process. The Tuning approach consists of a methodology to (re-)design, develop, implement and evaluate study programmes for each of the Bologna cycles. Again, however, the topic of ID is not mentioned in this document.

In 2003, the European Association of Intellectual Disability Medicine (former MAMH) published a manifesto on health care for people with intellectual disability, which included specific recommendations on professional training (<http://www.mamh.net/>). In December 2005, a questionnaire was sent to doctors in six European countries plus the USA, Canada, Japan and Australia. The overall conclusion was that training in ID medicine was very limited for medical students. In most of the countries involved, training was optional and only general subjects, such as psychiatry, genetics and paediatrics, made some indirect references to ID. Following these results, MAMH and European IASSID organised a joint round table on this topic and created a Task Force at the 2nd IASSID European Congress, held in Maastricht in 2006. The document produced included an introduction to why training in ID-medicine is necessary (health inequities and disparities); and two key points: (1) An overview of the educational objectives to cover this need; and (2) A plan for implementation in universities, medical colleges and societies, including presentation to governments and parents organisations (Scholte 2008).

Education and training on ID in provided by Health Organizations in Europe

Out of the 15 organisations that were contacted, eight provided direct information on activities and programmes related to education and training in ID. Twelve organisations had information available on their WebPages or other sources (e.g. Pubmed). Nine of these had information related to ID health issues. The programmes and information related to ID are summarised in Table 2. The information has been structured in four sections: undergraduate, graduate, Life Long Learning (LLL) and other education and training.

Several world organisations provide specific information on Europe (i.e. World Health Organisation) or include European Associations or key focal points from Europe (i.e. IASSID, World Psychiatric Association, International Council of Nurses). A special reference should be made to the key contribution made by the Department of Mental Health and Drug Addiction of the World Health Organization, which has taken a major lead in the field of ID in recent years. The publication of the WHO Atlas on ID resources has provided a framework for understanding current gaps and needs in several aspects related to ID, including education (WHO 2007).

Non-formal training and non-professional training

In Europe, the rate of dependent people, who are mainly cared for by their families or by informal and unqualified caregivers, has grown rapidly. Unlike many other professions, there is no European consensus about the entry-level needs of workers in this sector. Caregivers often lack specific information about the illness of the person being cared for and about the risks that this task entails for the health of the caregiver. Current caregiver training needs are as follows: (1) a comparable base for frontline care staff across Europe must be established, and (2) an accessible and transferable certificate for workers and employers (at the semi-professional level) must be provided. As for the non-professional level, needs are as follows: (3) support and care delivery improvement, (4) integration enhancement, and (5) increased mobility. Although ID is not a main focus with regard to caregiver training in Europe, services for families of persons with ID, which include non-formal training programmes, appear in the majority of European countries (80.9%), while the mean rate for other world regions is 66.7% (WHO 2007).

Within the European Leonardo programme, a series of training projects for caregivers of persons with disabilities have been developed. These projects have set up standards and guidelines for training, training modules and materials, and exams aimed at developing a common European Care Certificate (ECC) for the entry level of social care staff. This system is based on a set of agreed-upon definitions of the minimum knowledge base that staff entering social care services for the first time need to have in order to work in the social care sector in any member country of the EU. These definitions are called Basic Learning Outcomes (BESCLO) (see <http://www.eccertificate.eu>). BESCLO covers both the main areas that students need to learn about and the learning outcomes they must achieve in order to be awarded the certificate. This approach focuses on a demonstration of significant skills, knowledge, or understanding by the learner at the end of a lesson, unit, or course. A key point is the emphasis on outcomes (what a person can do after the module) as opposed to inputs (what a person is shown in the module). It includes the following main areas: understanding the values of social care, promoting life quality for the individuals being supported, working with risk, understanding the role as a care worker, being safe at work, communicating positively, recognizing and responding to abuse and neglect and developing as a worker. The 2009–2011 CCFC project (Creating a Common Foundation in Care using the ECC) has been a large partnership of 16 nations working to spread the use of the ECC across Europe, to develop an online version of the exam and to establish it as the principle entry level award in the care sector.

Training in ID either as specific modules or as part of the overall content, has been developed at the *CARERS* project aimed at offering education and training for family and other non-professional or non-formal caregivers in six member state countries (<http://www.carers-project.eu>). Other projects within the Leonardo da Vinci programme have been aimed at improving and assessing the quality of education and vocational training. Examples are the European Quality Management Project (EQM-D) (<http://www.eqmpd.com/>) and the Quality of Life Measures project (QOL) (<http://qol.euproject.org/> and <http://www.vcaa.vic.edu.au>).

Opportunities for education and training harmonization in Europe

The framework for the European policy on education and training is the 1999 Bologna declaration aimed at creating a new European Higher Education Area (EHEA). It was followed by a series of key changes and reinforcements in European education, as well as programmes, strategies, and tools to further the harmonization of training and education in Europe. The main aspects of this complex and ongoing process are summarised in Table 3.

The European Commission has integrated its various educational and training initiatives under the Lifelong Learning Programme (2007–2013) and its four sub-programmes, a series of transversal actions and the Jean Monnet action for international cooperation beyond the European Union.

The assessment of the Bologna process was carried out by the *European Qualifications Framework* (EQF), which was adopted by the *European Parliament and Council* on 23 April 2008. Using 8 reference levels based on learning outcomes (defined in terms of knowledge, skills and competences), the EQF shifted the focus from input (length of a learning experience, type of institution) to that which a person holding a particular qualification actually knows and is able to do. The EQF level descriptors differ from the Bologna level descriptors, which were developed specifically for higher education needs, in that the EQF, as a lifelong learning framework, must also encompass vocational education and training (VET) and work contexts.

Aiming for a geographical reach beyond Europe's borders, the Jean Monnet programme stimulates teaching, reflection and debate on the European integration process at higher education institutions worldwide (http://ec.europa.eu/education/programmes/programmes_en.html). There are other international cooperation programmes focused on education, such as Tempus, the trans-European programme of cooperation for the development and the restructuring of higher education systems in central and eastern European countries (PHARE), the republics of the former Soviet Union (TACIS) and the Southern Mediterranean countries. Erasmus Mundus is a programme aimed at promoting the European Union as a centre of excellence in learning around the world by supporting inter-university European Union Masters Courses.

In spite of the considerable progress of educational harmonization in Europe, health curriculum content, time for completion, and skills requirements differ significantly across different EU countries, particularly when comparing the former EU-17 with new state members. There is a need for improving harmonization of health training programmes in

Europe and for developing common competencies in specialised health areas as it has been highlighted in public health (Westerling 2009).

Discussion

Despite the enormous importance that ID has in the health status of individuals and the societal related costs, there is very little scientific knowledge about education or training for health professionals who care for people with ID. Only 35 scientific papers were found and most of them were focused on mental health or nursing issues. Further research is needed in order to establish and quantify the benefits of professional training or students education and also to know what are the best strategies to implement. Research on strategies and effects of training in other health professionals closely related to ID would also be important, such as general practitioners, dentist, neurologists, paediatricians, etc. Papers aimed at providing evidence to promote education police changes at national or European contexts are urgently needed.

The quality of care received by people with ID could be also mediated by the attitudes of professionals. Studies show that professionals could be overwhelmed by caring for a population for which they feel unprepared (Wilkinson *et al.* 2012), or by attending a growing number of patients with ID in a service developed for patients with less complex needs (Rose *et al.* 2012). In other cases, there are myths about the dangerousness of people with ID who have behavioural disorders (Werner and Grayzman 2011) and sometimes professionals hold attitudes toward persons with intellectual disabilities that are not entirely consistent with the community living philosophic paradigm (Ouellette-Kuntz 2003). Therefore it is necessary for training packages and educational programmes in ID to include contents able to promote a positive attitudinal change in students and health care professionals toward persons with ID.

Education and training on ID provided by Health Organizations in Europe were mainly oriented to mental health issues except that of the European Association of Intellectual Disability Medicine (MAMH). It is important to develop programmes and training materials beyond mental health in ID. Different sections of the European Union of Medical Specialists (UEM), the World Organization of National Colleges, Academies and Academic Associations of General Practitioners/Family Doctors (WONCA), the European Union of General Practitioners (UEMO), the Council of European Dentists, the Association for Dental Education in Europe and the European Paediatric Neurology Society among many other relevant organizations could greatly contribute to a better education of health professionals by developing core training curriculums which include training in ID health related issues.

Regarding information on ID in the diverse health sciences education programmes, very scarce information was also found. Where training modules on ID do exist, they are limited to few professions: mainly psychiatrists, psychologists and special educators. A major source of information was the WHO Atlas on ID (WHO 2007). The lack of visibility and low interest in this area, which are highlighted in the WHO report, may be the basis for the low priority of ID in training curricula across Europe and may be also linked to ID's lack of parity in policy and planning in relation to MH and general healthcare. Recent studies in

Europe, such as DECLOC and POMONA-II, highlight the fact that inequalities in care for persons with ID persist in Europe (Salvador-Carulla and Garcia-Gutierrez 2009).

To complete this information, country data should be provided. This would allow for an analysis of the differences and similarities between the EU member states. The POMONA-II project has contributed to an understanding of national similarities and dissimilarities, particularly between western and eastern European countries, as well as of differences within other sectors, such as social sciences and education (van Schrojenstein Lantman-de Valk H 2009; Martínez-Leal *et al.* 2011). Within the health sector, ID modules are more frequent in graduate training than in undergraduate training, where less than half of focal experts report the existence of these programmes in their respective countries. The fact that training on ID is offered only in a few countries to paediatricians (36.3%), primary health-care workers (37.0%), and physicians (39.0%), might be a matter for concern (WHO 2007).

In Europe, the training rates for other health professionals are below the mean for other world regions, although these results may be biased. In any case, studies in countries with a longstanding tradition of specific training in ID, such as United Kingdom, still report that over 75% of social care staff is unqualified (Brand 2000). Current European curricula do not properly address generic training in ID in medicine (UEMS), psychology (Europsy) or nursing (ICN). The UEMS survey confirms the gap in ID training (Lotz-Rambaldi *et al.* 2008). When ID is mentioned, European scientific and professional associations show very different views on this topic.

The existing gap on generic ID training in the health sciences increases when the focus is placed on mental health. ID has consequences that are both lifelong and similar in the majority of European countries. There is an urgent need to agree upon key concepts and common training tools, as well as to develop an integrated training approach to this topic. In this approach, different contextual/environmental factors (social, psychological and biological) would be considered and contributions from other professionals (i.e. speech therapists, occupational therapists, physiotherapists, psychologists, nurses) would be taken into account (Bouras *et al.* 1993).

However, several European countries have provided examples of good educational and training practices that could be incorporated into the European core curricula (van Schrojenstein Lantman-de Valk *et al.* 2006). In the UK, ID specialist training takes the route of Psychiatric training, but with more emphasis on the importance of excluding physical disorders that could present as psychiatric symptoms. In the UK a governmental drive also ensures that all health care professionals are exposed to some training in the health needs of people with ID; this was a specific recommendation made in the Michael's report in 2008 (Michael 2008). In the Netherlands, general practitioners specialise in the medical needs of people with ID. Recently, a short training scheme in Germany has also been emphasising important aspects of communication, specific clinical problems and behavioural, emotional and sensory disorders, amongst others. The identification of European centres of excellence and the use of e-learning technology may significantly reduce the current training gap identified in Europe.

Experiences and needs assessment in other world regions (Burge *et al.* 2008) can also provide a knowledge base for the development of this area in Europe. As a matter of fact, the current pace of development of common education strategies in Europe provides an excellent window of opportunity to promote ID in European training curricula and programmes. For example, although the basic European Certificate in Psychology (EuroPsy) does not mention ID, specific Advanced Diplomas will be developed in the future and ID could be incorporated. This topic should be included into the training programmes and curricula with adequate length, style, and practical activities. These activities should be promoted by the European associations on ID in cooperation with leading institutions in Europe. For example, the UEMS Board of Psychiatry may be asked to develop a specific training scheme on the Psychiatry of ID following the example of other subspecialties, such as Consultation Liaison Psychiatry and Psychosomatic Medicine or Child and Adolescent Psychiatry. The forthcoming revisions of existing international documents should provide a proper understanding of the educational processes and strategies –that currently exist and are needed– to meet the real needs and rights of persons with ID and the professionals working with them. These strategies should incorporate all levels of training (informal, non-formal, undergraduate, graduate and lifelong learning), should address all professionals working in this field, and should strengthen the understanding of ID as part of the group of developmental disorders across the full life span. An open access web providing updated information and toolkits may improve the available knowledge base and reduce the existing training gap in this field.

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Table 1

Scientific papers about ID and ID related health issues published between 1990–2012

Author(s) (year)	Title	Published
Costello <i>et al.</i> (2010)	Training professionals, family carers and support staff to work effectively with people with intellectual disability and mental health problems	2010, New York: Psychology Press, pp. 117–136
Gates (2010)	When a workforce strategy wont work: critique on current policy direction in England, UK	<i>J. Intellect. Disabil.</i> , 2010, 14, 251–258
Harcy and Chaplin (2010)	Using a simulation exercise to develop staff competence in a specialist inpatient service	<i>Advances in Mental Health and Intellect Disabilities</i> 2010, 4, 35–39
van Vonderen, Duker and Didden (2010)	Professional development improves staff's implementation of rehabilitation programmes for children with severe-to-profound intellectual disability	<i>Developmental Neurorehabilitation</i> 2010, 13, 351–359
Barr (2009)	Learning disability nurse education: an opportunity to contribute to shaping the future?	<i>J. Intellect. Disabil.</i> , 2009, 13, 179–182
Crickmore and Wray (2009)	Education and training for learning disability practice: key messages from contemporary literature	<i>J. Intellect. Disabil.</i> , 2009, 13, 291–304
McKeon (2009)	A survey of clinical nursing skills in intellectual disability nursing	<i>J. Intellect. Disabil.</i> , 2009, 13, 31–41
Woodward and Halls (2009)	Staff training in the mental health needs of people with learning disabilities in the UK	<i>Advances in Mental Health and Learning Disabilities</i> 2009, 3, 15–19
Dellavia <i>et al.</i> (2009)	Special care dentistry for people with intellectual disability in dental education: an Italian experience	<i>Eur. J. Dent. Educ.</i> 2009, 13, 218–222
Sheerin and McConkey (2008)	Frontline care in Irish intellectual disability services: the contribution of nurses and non-nurse care staff	<i>J. Intellect. Disabil.</i> , 2008, 12, 127–141
Holt <i>et al.</i> (2005)	Mental Health in Learning Disabilities: A training resource	2005, Brighton: Pavilion Publishing
Raghavan and OHara (2005)	Cultural diversity, mental health and learning disabilities: training module	2005, Brighton: Pavilion Publishing
Dobson <i>et al.</i> (2004)	Learning about touch: An exploratory study to identify the learning needs of staff supporting people with complex needs	<i>J. Learn. Disabil.</i> , 2004, 8, 113–129
Tsiantis (2004)	Care staff awareness training on mental health needs of adults with learning disabilities	<i>J. Learn. Disabil.</i> , 2004, 8, 221
Manthorpe (2003)	Learning disability nursing: User and carer perceptions	<i>J. Learn. Disabil.</i> , 2003, 7, 119–135
Edelstein and Glenwick (2001)	Direct-care workers' attributions of psychopathology in adults with mental retardation	<i>Ment. Retard.</i> , 2001, 39, 5
Jones <i>et al.</i> (2001)	Evaluation of the dissemination of active support training in staffed community residences	<i>Am. J. Ment. Retard.</i> , 2001, 106, 4, 344–358
Quiqley <i>et al.</i> (2001)	Staff knowledge about symptoms of mental health problems in people with learning disabilities	<i>J. Intellect. Disabil</i> 2001, 5, 235
Holt, Costello and Oliver (2000)	Training direct care staff about the mental health needs and related issues of people with developmental disabilities	<i>Mental Health Aspects of Developmental Disabilities</i> 2000, 3, 132–139
Lindop and Read (2000)	District nurses' needs: palliative care for people with learning disabilities	<i>Int. J. Palliat. Nurs.</i> , 2000, 6, 117–122
Ward (1999)	Modernising the social care workforce-the first national training strategy for England: Supplementary report on learning disability	1999, Leeds: Training Organisation for the Personal Social Services

Author(s) (year)	Title	Published
Bouras, Murray and Joyce (1997)	Mental Health in Learning Disabilities: A training pack for staff working with people who have a dual diagnosis of mental health needs and learning disabilities	1997, Brighton: Pavilion Publishing
Bouras and Holt (1997)	A Training Package for Staff Working with People with a Dual Diagnosis of Learning Disability and a Mental Health Problem	1997, Brighton: Pavilion Publishing
Hyde and Kerry (1997)	Introducing students to learning disabilities nursing	<i>Nurs. Stand.</i> , 1997, 11, 46–47
Barr (1996)	The challenge for learning disability nurses	<i>Prof. Nurse</i> , 1996, 12, 231–233
Kordoutis <i>et al.</i> (1995)	Change in care staff's attitudes towards people with learning disabilities following intervention at the Leros PIKPA asylum	<i>Br. J. Psychiatry Suppl.</i> , 1995, 28, 56–69
Lanqan <i>et al.</i> (1993)	Community care and the general practitioner: primary health care for people with learning difficulties. Summary of final report to the Department of Health	1993, Bristol: Norah Fry Research Centre
Russell and Kinirons (1993)	The attitudes and experience of community dental officers in Northern Ireland in treating disabled people	<i>Community Dent. Health</i> , 1993, 10, 4, 327–333
Eqqert and Berry (1992)	German, Irish and Australian high school students' perceptions of mental handicap	<i>Int. J. Rehabil. Res.</i> , 1992, 15, 4, 349–354
Hallawell (1992)	Learning disabilities nursing. Total quality in education	<i>Nurs. Stand.</i> , 1992, 6, 49, 51
Sines (1992)	Caring for people with learning disabilities (continuing education credit)	<i>Nurs. Stand.</i> , 1992, 7, 10 NU, 3–8
Crawford (1991)	New report recognises value of mental handicap nurses	<i>Nursing (Lond.)</i> , 1991, 4, 4–5
Henry <i>et al.</i> (1991)	Education: a conversion course in mental handicap	<i>Nurs. Stand.</i> , 1991, 6, 10, 35–37
Rose and Holmes (1991)	Changing staff attitudes to the sexuality of people with mental handicaps: An evaluative comparison of one and three day workshops	<i>Mental Handicap Research</i> 1991, 4, 67–79
Bickley (1990)	Dental hygienists' attitudes towards dental care for people with a mental handicap and their perceptions of the adequacy of their training	<i>Br. Dent. J.</i> , 1990, 168, 9, 361–364,

Table 2

Education and training on the field of intellectual disability (and mental health) in Europe

Organization	Undergraduate	Graduate	Life long learning	Others
World Psychiatric Association (WPA) Section 'Psychiatry of Intellectual Disability' (SPID)	Core Curriculum in Psychiatry for Medical Students (1998)	Institutional Programme on the Core Training Curriculum for Psychiatry (2002)	Training Material <ul style="list-style-type: none"> - Mental Health in Mental Retardation. The ABC for mental health, primary care and other professionals. - ICD 10 Training Kit, International Guidelines for Diagnostic Assessment. - Mental Health in Mental Retardation, Autism and Related Disorders. - International Guide for Using Medication Using medication to manage behaviour problems among adults with learning disabilities. 	In cooperation with WHO and WFME
European Union of Medical Specialists (UEMS) Section of Psychiatry		The Charter on Training of Medical Specialist in the European Community: Requirements for the specialty of Psychiatry (approved in 1998 and revised in 2003) Core curriculum on child and adolescent psychiatry *		
European Society for Children and Adolescent Psychiatry (ESCAP) European Federation of Psychiatric Trainees (EFPT) European Federation of Psychologists' Associations (EFPA) International Council of Nurses (ICN)		Framework for education and training for Psychologists in Europe (2001) Development of referent points to make programmes comparables in the framework of the Tuning Educational Structures Project		
European Association of Intellectual Disability Medicine (former MAMH) and the International Association of Scientific Research in Intellectual Disability (IASSID) European Association Mental Health in Intellectual Disability (MH-ID)	Education Questionnaire and Health SIRG IASSID-MAMH round table about education of medical students in ID medicine (Maastricht, 2006)		European Manifesto 2003. Need of training programmes for health professionals Practice Guidelines for Diagnostic, Treatment, and Related Support Services for Persons with Developmental Disabilities and Serious Behavioral Problems.	Cooperation with European IASSID (Working Group IASSID-MAMH on Education and Training)

* Karabekiroglu *et al.*, 2006.

Table 3

Politics, programmes and strategies on Intellectual Disabilities (and Mental Health) in Europe

POLICY: Education and Training (European Higher Education Area)	Maastricht Treaty (1992) Development of quality education and encouraging mobility	Bologna Declaration (1999) (European Higher Education Area)	Lisbon Strategy (2000). Role of education	Copenhagen Declaration (2002). European Cooperation in vocational education and training
PROGRAMMES: LIFELONG	Schools	Higher Education	Vocational Education and Training	Adult Education
LEARNING Programme 2007–2013	Comenius	Erasmus <i>Erasmus Mundus</i> Tempus Jean Monnet	Leonardo da Vinci	Grundtvig
STRATEGIES AND TOOLS	European Credit Transfer and Accumulation System (ECTS) Transparency and recognition of studies (formal, non- formal, informal)	Quality Assurance Networks: European Association for Quality Assurance in Higher Education (ENQA)	European Centre for the development of vocational training (ENQAVET)	European Qualification Framework (EQF)

Source: http://ec.europa.eu/education/index_en.htm.