The global burden of disabling hearing impairment: a call to action

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Abstract At any age, disabling hearing impairment has a profound impact on interpersonal communication, psychosocial well-being, quality of life and economic independence. According to the World Health Organization's estimates, the number of people with such impairment increased from 42 million in 1985 to about 360 million in 2011. This last figure includes 7.5 million children less than 5 years of age. In 1995, a "roadmap" for curtailing the burden posed by disabling hearing impairment was outlined in a resolution of the World Health Assembly. While the underlying principle of this roadmap remains valid and relevant, some updating is required to reflect the prevailing epidemiologic transition. We examine the traditional concept and grades of disabling hearing impairment – within the context of the International Classification of Functioning, Disability and Health – as well as the modifications to grading that have recently been proposed by a panel of international experts. The opportunity offered by the emerging global and high-level interest in promoting disability-inclusive post-2015 development goals and disability-free child survival is also discussed. Since the costs of rehabilitative services are so high as to be prohibitive in low- and middle-income countries, the critical role of primary prevention is emphasized. If the goals outlined in the World Health Assembly's 1995 resolution on the prevention of hearing impairment are to be reached by Member States, several effective country-level initiatives – including the development of public–private partnerships, strong leadership and measurable time-bound targets – will have to be implemented without further delay.

Abstracts in عربي, 中文, Français, Русский and Español at the end of each article.

Introduction

In general and irrespective of the age at which it develops, disabling hearing impairment has devastating consequences for interpersonal communication, psychosocial well-being, quality of life and economic independence.[1–3] If it develops in the young, such impairment impedes speech and language development and sets the affected children on a trajectory of limited educational and vocational attainment.[4–6] Children with hearing impairment may also be at increased risk of physical, social, emotional and sexual abuse and even murder.[7,8] In adulthood, disabling hearing impairment can lead to embarrassment, loneliness, social isolation and stigmatization, prejudice, abuse, psychiatric disturbance, depression, difficulties in relationships with partners and children, restricted career choices, occupational stress and relatively low earnings.[2,9,10]

As part of its core function as the "watchdog" for the well-being of the world's population, the World Health Organization (WHO) periodically provides estimates of the prevalences of major health conditions to guide policies and programmes in its Member States. This paper highlights the temporal trends seen in WHO's global estimates of the prevalence of hearing impairment since 1985, against a backdrop of global epidemiologic transition and the United Nations' emerging agenda for "disability-inclusive" development after 2015.[11] We explore the roadmap for the prevention of hearing impairment that was outlined in a resolution of the World Health Assembly in 1995[12] and suggest prerequisites for an effective and appropriate country-level response – especially for those low- and middle-income countries where the burden posed by such disability is particularly high.

Grades and functional status

For many years, WHO defined "disabling" hearing impairment as a permanent unaided hearing loss – in the better ear and averaged over frequencies of 0.5, 1, 2 and 4 kilohertz (kHz) – of more than 40 decibels (dB) in adults and 30 dB in children.[13] Unfortunately, this definition makes comparison with other disabilities or degrees of disability difficult. For example, it excludes people with mild or unilateral hearing impairment and takes no account of any underlying functional impairment in different environmental contexts. In 2001, WHO published the *International classification of functioning, disability and health*, in which all impairments were assessed in relation to activity limitations and participation restrictions.[14] This classification has since provided a uniform framework for evaluating and comparing diverse body dysfunctions.[14,15] It recognizes the role of contextual factors – such as environmental noise – in exacerbating functional deficits in people with "mild" or "slight" hearing impairment. It also treats "disabling hearing impairment" – or hearing disability – as a complex phenomenon that embraces bodily functions and structures as well as factors related to activity, participation and context.

Prevalences of disabling impairment

In 1985, when the global prevalence of hearing impairment was first estimated, 42 million people – 0.9% of the world's population – were thought to having disabling hearing impairment.[16] By 1995, the estimated number of people with such impairment had more than doubled, to 120 million – or 2.1% of the world's population – including about 70 million adults and 8 million younger individuals in developing countries.[16,17] Of the 360 million people thought to have disabling hearing impairment in 2011, approximately 32 million were children younger than

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15 years and, of these, 7.5 million were younger than 5 years.[18] The burden of disabling hearing impairment among both children and the elderly is thought to be greatest in the Asian Pacific area, southern Asia and sub-Saharan Africa.[18]

The Global Burden of Disease Hearing Loss Expert Group has recently proposed a modified classification of hearing impairment.[19] According to this classification, about 538 million people older than 5 years have disabling hearing impairment.[19] Although this classification still employs the better-ear hearing threshold, in decibels, averaged over frequencies of 0.5, 1, 2 and 4 kHz, it changes the threshold for disabling hearing impairment to 35 dB for all age groups and equates "unilateral hearing impairment" with "bilateral mild hearing impairment". It also recalibrates the hearing scale in equal steps of 15 dB in an attempt to reflect crucial shifts in hearing perception more accurately. This new classification is consistent with the *International classification of functioning, disability and health* and with the increasing evidence that difficulties in language development may arise in children with a hearing loss of less than 35 dB. Approaches to the classification of auditory disorders in general are discussed elsewhere.[20]

Several factors have contributed to the upward trend seen in estimates of the global prevalence of disabling hearing impairment. One is the increasing prevalence of presbyacusis as mean life expectancy increases in many countries. Another is improvement in the technology available for the early detection and diagnosis of hearing impairment.[18] A third reason is the widespread use of ototoxic medications for treating neonatal infections, ear infections, malaria, cancer, human immunodeficiency virus (HIV) infection and drug-resistant tuberculosis.[21] Rubella, mumps and measles remain significant causes of hearing impairment in regions with inadequate vaccine coverage.[18] Furthermore, rapid and uncontrolled urbanization in many emerging economies – coupled with a common lack of enforceable regulations on environmental and occupational noise – constitutes a growing source of noise-induced hearing impairment.[22,23] In general, available estimates of the prevalence of hearing impairment remain crude because many countries struggle to conduct relevant population-based surveys using standardized protocols and classification methods.

Global health

Since 2001 the health priorities of donor-dependent countries have largely been driven by the Millennium Development Goals (MDGs). Although interventions based on these Goals have often reduced the incidence of fatal childhood illness and increased longevity, they appear to have had little impact on the global burden of disabling hearing impairment. The effective prevention, recognition and treatment of disabling hearing impairment are probably critical to the attainment of MDG 1 – eradication of global poverty – and MDG 2 – full access to primary education for all children.[24] People with HIV infection, tuberculosis or malaria – infections addressed by MDG 6 – are also at high risk of developing hearing impairment, either from their infections or their treatment.[25–28]

Many individuals with disabling hearing impairment are disadvantaged and vulnerable children, young adults in their prime years or elderly people in dire need of societal support. The challenges of living with such impairment, particularly in poorly-resourced countries, should engender prevention efforts. Recent developments aimed at redressing the omission of disability indicators in the current MDGs offer a useful window of opportunity. Since 2009 several agencies of the United Nations have been trying to develop strategies for mainstreaming disability into the global health agenda.[29] In September 2013, for example, a meeting of the United Nations General Assembly at the level of "heads of state and government" was held in New York City to discuss global action and national plans for ensuring a disability-inclusive post-2015 development agenda. The United Nations Children's Fund has also convened a special forum of stakeholders to articulate action plans for children with disabilities – within the United Nations' larger post-2015 disability initiative. These efforts are primarily geared towards promoting access and inclusiveness for children and adults with disability. However, they also provide valuable platforms for advocating global support for effective programmes for the prevention of avoidable disabling hearing impairment. Additionally, among global advocates of neonatal and child survival, the need to pursue disability-free survival in the post-2015 agenda is the subject of growing awareness, acknowledgement and interest.[30] This is a striking departure from the almost exclusive focus on mortality reduction that has been observed since 2001.

Reducing the burden

Although hearing disability is usually experienced over a lifetime,[1–10] about half of the incidence of hearing impairment in all age groups could probably be avoided via known and proven methods.[31]

Approximately 141 million live births occurred in the world in 2012 and most of them – about 127 million – occurred in developing countries. The estimated incidence of permanent congenital or early onset hearing impairment in developing countries in 2012 – six cases per 1000 live births – was three times higher than in developed countries.[32] Although priority must be given to the primary prevention of hearing impairment, especially in low- and middle-income countries, secondary and tertiary prevention via early detection and treatment of hearing impairment, especially in infants and young children, are still needed and should be actively encouraged.[33] Routine screening on school entry should be considered, as it can be more readily implemented than universal neonatal screening. The effective rehabilitation of a child with hearing impairment is complex. This is especially the case in countries that are poorly resourced, where assistive technology such as hearing aids or cochlear implants, on-going maintenance and inclusive educational support are not readily available.

Although the cost–effectiveness of hearing aids, cochlear implants and other hearing devices has been demonstrated in several studies, albeit predominantly in the developed world, the costs of acquiring and maintaining such a device remain prohibitive for most potential users in low- and middle-income countries.[34–37] According to WHO, the target price for an "affordable" hearing aid should be no more than 3% of the per capita of the user's country.[34] When this definition was proposed, 3% of the per capita gross national product of Bangladesh, India, Kenya, Malawi and Nigeria was 26, 46, 26, 10 and 43 United States dollars (US$), respectively. These target prices – which represent small fractions of the corresponding mean price of a hearing aid in a developed country – are too high for many low-income countries. In addition, they exclude the costs of ear moulds, maintenance and the periodic purchase of batteries. The scenario is even more daunting for cochlear implants, which are associated with an estimated lifetime cost of about US$ 90 000 per child with severe to profound hearing impairment.[38,39] Even

Box 1. **Recommended roadmap for the prevention of hearing loss**[12]

Member States of the World Health Organization are required to:

- prepare national plans for the prevention and control of major causes of avoidable hearing loss and for early detection of such loss in neonates, infants, children and the elderly, within the framework of primary health care;
- take advantage of existing guidelines and regulations or introduce appropriate legislation for the proper management of particularly important causes of deafness and hearing impairment, such as otitis media, use of ototoxic drugs and harmful exposure to noise, including noise in the work environment and loud music;
- ensure the highest possible coverage of childhood immunization against the target diseases of the Expanded Programme on Immunization and against mumps, rubella and meningococcal meningitis whenever possible;
- consider setting up mechanisms for collaboration with nongovernmental or other organizations for support to – and coordination of – action to prevent hearing impairment at the country level, including the detection of hereditary factors and genetic counselling; and
- ensure appropriate public information and education for hearing protection and conservation in particularly vulnerable or exposed population groups.

the most advanced of the hearing devices currently available cannot restore "normal" hearing. Outcomes with the same device vary among patients because of a mix of individual biological, physiological and psychological factors.

Many low- and middle-income countries have large shortages of trained professionals who can provide hearing assessments and on-going support services. For most hearing parents, enrolment of a child with a hearing disability in a school for the deaf, where the child will be taught sign language, is the least preferred but most affordable option for the child's education.

Many of these problems could be resolved, at least partially, by improvements in the primary prevention of hearing impairment. Such prevention, if it is to be effective, requires a thorough understanding of the etiology of, and risk factors for, hearing impairment in a given region or population. Some preventable or treatable causes of hearing impairment – such as mumps, rubella, meningitis, otitis media, use of ototoxic drugs and harmful exposure to prolonged and excessive work place or leisure noise – were listed in 1995 in a resolution of the World Health Assembly.[12] This resolution, which outlined a "roadmap" for reducing the burden posed by disabling hearing impairment (Box 1), highlighted the need for routine immunization against the vaccine-preventable causes of such impairment, genetic counselling to reduce inherited hearing impairment – especially in regions with high rates of consanguineous marriage – and legislation for promoting and enforcing hearing conservation activities. Although much of the content of this resolution remains as relevant today as it was almost two decades ago, there is a need to update the resolution's provisions and reaffirm its guiding principle in the light of important observations made since 1995.[31,32,40–42]

Since the resolution was published, birth trauma, preterm birth, low birth weight, birth asphyxia and sepsis have been identified as risk factors for diverse developmental sequelae, including hearing impairment.[43] Similarly, severe neonatal jaundice – if not treated promptly – can be a contributor to disabling hearing impairment when combined with substantial glucose-6-phosphate dehydrogenase deficiency.[43–45] Despite ample evidence of a link between hearing impairment and HIV infection, tuberculosis and malaria,[25–28] such an association has rarely been acknowledged in the global fight against these "big three" diseases. Similarly, although childhood malnutrition is of great global health interest, the potential association between malnutrition due to protein–energy or micronutrient deficiency and hearing impairment has also largely remained uncharted.[46] The emerging global pressure for a disability-inclusive developmental agenda should serve as an impetus to update and adapt the current roadmap for the reduction of hearing impairment – and incorporate and integrate all known causal pathways for disabling hearing impairment and child survival.

WHO has recently developed a set of excellent and well-illustrated training guides for hearing care at the basic, intermediate and advanced levels.[47] The main aim of these guides is to equip primary care health workers and communities in developing countries with simple and effective methods to reduce the burden of hearing disorders.[47] The typical activities required at each level of prevention – from preconception to adulthood – are summarized in Table 1. Although the guides will eventually have to be tailored to the specific needs of each country, they already provide a useful starting point for the immediate implementation of activities to reduce the incidence of disabling hearing impairment.

Leadership and engagement for national action

Global initiatives are helpful in attracting resources towards tackling particular health problems and generating awareness about them. However, the impetus for bold and effective actions against disabling hearing impairment would appear to rest almost entirely on the advocacy efforts of people with such impairment, their families and those serving their needs. For those with disabling hearing impairments, effective communication with relevant policy-makers is often very difficult. This is particularly true for the most impaired, especially individuals with untreated congenital or early onset profound hearing loss who lack access to any assistive technology.

It is noteworthy that the governments of China, India and Nigeria – countries with some of the highest burdens of disabling hearing impairment globally – have acknowledged the problem by establishing national ear care programmes or agencies. Such programmes and agencies should be nurtured and promoted in many more countries. However, the task of leading a national fight against an invisible and highly stigmatizing chronic condition such as disabling hearing impairment must be approached with great care.[48] In such a fight, the consequences of inaction or ineffective leadership are not usually fatal, so the benefits of the fight may not be very obvious to the public, especially in the short-term. Leadership by individuals with academic or professional qualifications is likely to be advantageous but perhaps not sufficient on its own to assure the required outcomes. Leaders must be visionary, self-motivated and held to measurable, time-bound targets within the framework of the 1995 World Health Assembly resolution and any other relevant global agenda. If WHO's Member States are held accountable to their obligations under the 1995 resolution, including the provision of periodic and independently verifiable reports, then the effectiveness of any relevant national agency is likely to

Table 1. **Activities for the primary and secondary prevention of disabling hearing impairment**[31]

Group/disorder/risk factor[a]	Prevention	
	Primary	Secondary
Prenatal		
Rubella	Immunization of girls	Early detection by screening everyone or high-risk groups, prompt intervention and – if available – treatment
Syphilis	Health education, treatment of the mother	
Toxoplasmosis	Health education, treatment of the mother	
HIV infection	Risk reduction through harm-reduction counselling	
Iodine deficiency	Nutrition, dietary supplementation	
Hypertension	Promotion of appropriate diet and moderate physical activities to prevent obesity	
Ototoxicity	Avoidance of ototoxic drugs or only rational and prescribed use, use of antioxidants	
Genetic causes, family history of deafness	Health education and counselling for consanguinity, identification of carriers	
Congenital anomalies	Possible termination of pregnancy where needed	Surgery, when appropriate
Perinatal or neonatal		
Preterm birth, low birth weight	Adequate and appropriate nutrition or supplementation, antenatal care	Early detection by screening every one or high-risk groups and – if available – treatment
Birth trauma, hypoxia	Improved birth practice	
Herpes simplex infection	Timely caesarean section	
Cytomegalovirus infection	Promotion of personal hygiene, health education	
Severe jaundice	Detection of at-risk groups including screening for G6PD deficiency and blood group incompatibility	
Ototoxicity	Avoidance of ototoxic drugs or only rational and prescribed use, use of antioxidants	
Exposure to excessive, prolonged incubator noise	Avoidance or reduction in excessive noise emissions	
Childhood		
Impacted cerumen	Promotion of personal hygiene and avoidance of earbuds	Health education including appropriate occupational and safety practices; screening for early recognition of disease and hearing loss, prompt treatment of disease and any complications, case follow-up
Otitis externa	Health education	
Foreign bodies	Avoidance of ear buds	
Acute or chronic otitis media	Promotion of personal hygiene, better living conditions, better nutrition and breastfeeding, better management of infections of upper respiratory tract	
Measles, mumps	Immunization	
Cerebral malaria	Vector reduction, prophylaxis	
Meningitis	Immunization, prophylaxis	
Ototoxicity	Avoidance of ototoxic drugs, solvents and industrial chemicals; rational and prescribed use only, use of antioxidants	
Adulthood		
Ototoxicity	Avoidance of ototoxic drugs or only rational and prescribed use, use of antioxidants	Early detection and prompt management
Encephalitis, meningitis	Immunization, prophylaxis	
Exposure to excessive and/or prolonged noise	Education, hearing conservation, enforceable regulations	
Presbyacusis	None	Auditory screening for the elderly
Trauma	Promotion of use of helmets and seat belts	Surgery
Otosclerosis	None	Surgery

G6PD, glucose-6-phosphate dehydrogenase; HIV, human immunodeficiency virus.

[a] For all age groups, the activities for tertiary prevention are the same: fitting of hearing devices (hearing aids, cochlear implants, etc.), hearing rehabilitation, training in sign language and special or inclusive education.

be closely monitored. Since many governments lack the capacity to implement the roadmap in a comprehensive manner, public–private partnerships – including "north–south" humanitarian outreaches – need to be actively encouraged. Such partnerships must be supported with appropriate legislation, in line with the Convention on the Rights of Persons with Disabilities, 2006.[29] Additionally, WHO's regional offices should be willing, able and ready to provide technical assistance where required through established channels of collaboration.

Finally, a revised resolution on the prevention of disabling hearing impairment would need to reflect the on-going dialogue and global action plans for people with disability in the post-2015 developmental agenda of the United Nations and its sister agencies. At least five tasks are worth considering by developing countries. First, such countries could train and equip middle-level health

personnel to provide hearing tests and intermediate-level care for individuals with hearing loss, within the framework of existing health-care systems. Second they could develop "tele-health" systems to help fill gaps – created by shortages in the human resources for health – in the delivery of services for the prompt diagnosis, treatment and prevention of disabling hearing impairment. Third, they could facilitate the access of people with disabling hearing impairment to free or affordable hearing devices, possibly through a consortium-buying programme in collaboration with the leading manufacturers. Fourth, they could provide resources for the routine developmental evaluation of those who survive the potentially fatal conditions that are established risk factors for hearing disability. Finally, they could fund population-based research to gain a better understanding of the epidemiological distribution of hearing impairment across different strata within the country and accurately guide the development of interventions against such impairment.

In conclusion, all Member States of WHO – and particularly those in the developing regions of Africa and Asia – should be alerted to the growing prevalence of disabling hearing impairment, which is a silent, invisible and life-long condition. The emerging global and high-level interest in a disability-inclusive developmental agenda offers a unique and timely opportunity, both to address the neglected needs and aspirations of those with disabling hearing impairment and to take the necessary actions to arrest the current upward trend in the burden posed by such impairment. Strong country-level leadership will be required if Member States in the regions most affected are to meet the goals outlined in the 1995 World Health Assembly resolution on the prevention of hearing impairment – and those of any future revision of that resolution. ■

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ملخص

العبء العالمي لضعف السمع المسبب للعجز: نداء للعمل

يوجد تأثير بالغ لضعف السمع المسبب للعجز، في أي سن، على التواصل بين الأفراد والصحة النفسية والاجتماعية ونوعية الحياة والاستقلال الاقتصادي. ووفقاً لتقديرات منظمة الصحة العالمية، ازداد عدد الأشخاص المصابين بهذا الضعف من 42 مليوناً في عام 1985 إلى حوالي 360 مليوناً في 2011. ويشمل الرقم الأخير 7.5 مليون طفل أقل من 5 سنوات. وفي عام 1995، تم وضع "خريطة طريق" للحد من العبء الذي يفرضه ضعف السمع المسبب للعجز بموجب أحد قرارات جمعية الصحة العالمية. وبينما يظل المبدأ الرئيسي في خريطة الطريق هذه صالحاً وذا صلة، فإن ثمة حاجة إلى بعض التحديث لإيضاح التحول الوبائي السائد. وندرس المفهوم التقليدي لضعف السمع المسبب للعجز ودرجاته – في سياق التصنيف الدولي لتأدية الوظائف والعجز والصحة – وتعديلات التدرج التي اقترحتها في الآونة الأخيرة هيئة من الخبراء الدوليين. ويتم كذلك مناقشة الفرصة التي يتيحها الاهتمام العالمي والعالي المستوى المستجد في تعزيز الأهداف الإنمائية الشاملة لرعاية العاجزين لما بعد عام 2015 وبقاء الطفل خالياً من العجز. ونظراً للارتفاع الشديد في تكاليف الخدمات التأهيلية على نحو تعجيزي في البلدان المنخفضة والمتوسطة الدخل، يتم التشديد على الدور الحاسم للوقاية الأولية. وإذا كان من المقرر أن تقوم الدول الأعضاء بتحقيق الأهداف التي تم توضيحها في قرار جمعية الصحة العالمية لعام 1995 بشأن توقي ضعف السمع، فسوف يلزم تنفيذ عدة مبادرات فعالة على الصعيد القطري – بما في ذلك إنشاء شراكات بين القطاع العام والخاص وقيادة قوية وأهداف محدودة زمنياً وقابلة للقياس – دون مزيد من التأخير.

摘要

致残性听力障碍的全球负担：行动呼吁

对任何年龄而言，致残听力障碍对人际沟通、心理社会健康、生活质量和经济独立都有着深刻的影响。据世界卫生组织估计，患有这些障碍的人数从 1985 年的 4200 万增加到 2011 年的大约 3.6 亿。这一最新数字包括 750 万 5 岁以下的儿童。在 1995 年，世界卫生大会决议勾勒出减轻由致残听力障碍所带来负担的"路线图"。虽然此路线图的基本原则仍然有效和重要，但是需要进行一些更新来反映当前流行病学方面的转变。我们审查了致残听力障碍的传统观念和等级（在功能、残疾和健康国际分类的范畴内）以及最近由国际专家小组提出的等级修改。同样讨论了全球和高层在促进 2015 后残健共融发展目标和无残疾儿童存活方面新的关注所提供的机会。因为康复服务成本太高，令中低收入国家望而却步，所以强调了一级预防的关键作用。如果成员国要实现世界卫生大会 1995 有关预防听力障碍的决议勾画的目标，多个有效的国家级别方案（包括公私伙伴关系的发展、强有力的领导和有时限的可衡量目标）将必须刻不容缓地实施。

Résumé

Le fardeau mondial de la déficience auditive invalidante: un appel à l'action

À tout âge, la déficience auditive invalidante affecte profondément la communication entre les personnes, le bien-être psychosocial, la qualité de vie et l'indépendance économique. Selon les estimations de l'Organisation mondiale de la Santé, le nombre de personnes souffrant d'une telle déficience a augmenté de 42 millions en 1985 à 360 millions en 2011. Ce dernier chiffre comprend 7,5 millions d'enfants âgés de moins de 5 ans. En 1995, une «feuille de route» pour réduire le fardeau de la déficience auditive invalidante a été énoncée dans une résolution de l'Assemblée mondiale de la santé. Bien que le principe sous-jacent de cette feuille de route reste valide et pertinent, une mise

à jour s'avère nécessaire afin de refléter la transition épidémiologique prédominante. Nous examinons le concept traditionnel et les classes de déficience auditive invalidante – dans le cadre de la Classification internationale du fonctionnement, du handicap et de la santé – ainsi que les modifications à apporter au classement, qui ont été récemment proposées par un panel d'experts internationaux. Nous discutons également de l'opportunité offerte par l'intérêt mondial naissant et à un très haut niveau pour la promotion des objectifs de développement pour l'après-2015, qui tiennent compte de la question du handicap et de la survie des enfants sans handicap. Comme les coûts des services de réadaptation sont élevés au point d'être prohibitifs dans les pays à revenu faible et intermédiaire, nous insistons sur le rôle critique de la prévention primaire. Si les objectifs énoncés dans la résolution de 1995 de l'Assemblée mondiale de la santé sur la prévention de la déficience auditive doivent être réalisés par les États membres, plusieurs initiatives efficaces prises au niveau de chaque pays – y compris le développement de partenariats public-privé, un leadership fort et des objectifs mesurables à atteindre dans des délais déterminés – devront être mises en œuvre sans plus attendre.

Резюме

Глобальное бремя нарушений слуха, приводящих к инвалидности: призыв к действию

В любом возрасте инвалидность, связанная с нарушением слуха, оказывает глубокое влияние на межличностное общение, психосоциальное благополучие, качество жизни и экономическую независимость. По оценкам Всемирной организации здравоохранения, число людей с подобным дефектом увеличилось с 42 млн. в 1985 году до примерно 360 млн. в 2011 году. Последняя цифра включает в себя 7,5 млн. детей в возрасте до 5 лет. В 1995 году в резолюции Всемирной ассамблеи здравоохранения была изложена «дорожная карта» по сокращению бремени, вызванного нарушениями слуха. В то время как основной принцип этого плана остается актуальным и значимым, требуется его некоторое обновление, отражающее сложившуюся эпидемиологическую ситуацию. В данной работе рассматривается традиционная концепция и степени нарушений слуха, приводящих к инвалидности, в контексте Международной классификации функционирования, ограничений жизнедеятельности и здоровья, а также изменения в данной классификации, недавно предложенные группой международных экспертов. Также обсуждаются возможности, предоставляемые формирующимся всемирным и повышенным интересом в продвижении целей развития на период после 2015 года, включая вопросы инвалидности, и выживаемости детей без инвалидности. Поскольку затраты на реабилитационные услуги настолько высоки, что являются непомерными в странах с низким и средним уровнями доходов, подчеркивается важнейшая роль первичной профилактики. Если государства-члены собираются достичь целей, изложенных в резолюции Всемирной ассамблеи здравоохранения по профилактике нарушений слуха (1995 г.), то следует незамедлительно реализовать несколько эффективных инициатив на национальном уровне, включающих развитие государственно-частного партнерства, сильное руководство и принятие измеримых целей с определенными временными рамками.

Resumen

La carga global de la deficiencia auditiva incapacitante: una llamada a la acción

La deficiencia auditiva incapacitante tiene un impacto enorme en la comunicación interpersonal, el bienestar psicosocial, la calidad de vida y la independencia económica a cualquier edad. De acuerdo con los cálculos de la Organización Mundial de la Salud, el número de personas con dicha discapacidad aumentó de 42 millones en 1985 a unos 360 millones en 2011. Esta última cifra incluye 7,5 millones de niños con una edad inferior a los 5 años. En 1995 se preparó en una resolución de la Asamblea Mundial de la Salud el borrador de una «hoja de ruta» para reducir la carga que supone la deficiencia auditiva incapacitante. Aunque el principio subyacente de esta hoja de ruta sigue siendo válido y pertinente, es necesario actualizarla para reflejar la transición epidemiológica prevaleciente. Examinamos el concepto y los niveles tradicionales de deficiencia auditiva incapacitante – dentro del contexto de la Clasificación Internacional del Funcionamiento, de la Discapacidad y de la Salud - así como las modificaciones en la clasificación recientemente propuestas por un grupo de expertos internacionales. También se discute la oportunidad que ofrece el interés creciente a nivel mundial en la promoción de la discapacidad, incluidos los objetivos de desarrollo tras 2015 y la supervivencia de los niños sin discapacidad. Dado que los costes de los servicios de rehabilitación son tan elevados que resultan prohibitivos en los países con ingresos bajos y medios, se hace hincapié en el papel fundamental de la prevención primaria. Si los Estados Miembros deben alcanzar los objetivos planteados en la resolución de la Asamblea Mundial de la Salud de 1995 acerca de la prevención de la discapacidad auditiva, es necesario que se pongan en marcha, sin más demora, una serie de iniciativas nacionales eficaces, entre las que se encontrarían el desarrollo de asociaciones público-privadas, un liderazgo sólido y metas con plazos concretos y mensurables.

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