Current and future worldwide prevalence of dependency, its relationship to total population, and dependency ratios

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Objective To estimate the number of people worldwide requiring daily assistance from another person in carrying out health, domestic or personal tasks.

Methods Data from the Global Burden of Disease Study were used to calculate the prevalence of severe levels of disability, and consequently, to estimate dependency. Population projections were used to forecast changes over the next 50 years.

Findings The greatest burden of dependency currently falls in sub-Saharan Africa, where the "dependency ratio" (ratio of dependent people to the population of working age) is about 10%, compared with 7–8% elsewhere. Large increases in prevalence are predicted in sub-Saharan Africa, the Middle East, Asia and Latin America of up to 5-fold or 6-fold in some cases. These increases will occur in the context of generally increasing populations, and dependency ratios will increase modestly to about 10%. The dependency ratio will increase more in China (14%) and India (12%) than in other areas with large prevalence increases. Established market economies, especially Europe and Japan, will experience modest increases in the prevalence of dependency (30%), and in the dependency ratio (up to 10%). Former Socialist economies of Europe will have static or declining numbers of dependent people, but will have large increases in the dependency ratio (up to 13%).

Conclusion Many countries will be greatly affected by the increasing number of dependent people and will need to identify the human and financial resources to support them. Much improved collection of data on disability and on the needs of caregivers is required. The prevention of disability and provision of support for caregivers needs greater priority.

Keywords Dependency (Psychology); Population dynamics; Aging; Chronic disease; Disabled persons; Health services needs and demand; Activities of daily living; Cost of illness; Forecasting (*source: MeSH, NLM*).

Mots clés Dépendance (Psychologie), Dynamique population; Vieillissement; Maladie chronique; Handicapé; Besoins et demande services santé; Activité quotidienne; Coût maladie; Prévision (*source: MeSH, INSERM*).

Palabras clave Dependencia (Psicología); Dinámica de población; Envejecimiento; Enfermedad crónica; Evaluación de la incapacidad; Necesidades y demanda de servicios de salud; Actividades cotidianas; Costo de la enfermedad; Predicción (*fuente: DeCS, BIREME*).

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Introduction

There were major changes in population structures and disease patterns in the last century in economically more developed countries (the so-called demographic and epidemiological transitions). Other countries are currently experiencing these transitions, or will do so in the coming decades.

The "demographic transition" describes the shift from high fertility and high mortality, to low fertility and low mortality. This results in increasing life expectancy and an increasing proportion of elderly people in the population. The "epidemiological transition" describes the change from a predominance of infectious diseases, with high maternal and child mortality, to a predominance of chronic diseases.

An important effect of chronic diseases is a limitation in functional abilities, or "disability" (1). The inability to perform some key activities (e.g. basic mobility, feeding, personal hygiene and safety awareness) leads to "dependency" — the need for human help (or care) beyond that customarily required by a healthy adult. Most such help is given by family members or other "informal" carers (2). "High-intensity caring" is associated with restricted social and economic opportunities, and detrimental effects on the mental and physical health of the carer (3–5).

This study was conducted using data from the Global Burden of Disease Study (6), and United Nations population projections (7), to estimate the number of people who needed daily care, and to make predictions up to 2050.

Methods

Global burden of disease study

The age-specific and sex-specific prevalences of 483 diagnoses were estimated for the year 1990 using the best available data, or expert opinion if data were lacking, for eight country groups defined by the World Bank as being demographically and economically similar (8, 9). The groups were established market economies, former Socialist economies of Europe, sub-Saharan Africa, Latin America and Caribbean, Middle-Eastern crescent, China, India and Other Asia and Islands. Severity scores for disability were established empirically (as disability preference weights) for 22 sample diagnoses (or "indicator conditions"). These diagnoses were described in terms of the impairments typically associated with them. Severity scores were determined by an international panel of health professionals. An iterative "person trade-off" approach was used — participants chose whether it was more desirable to treat a given number of people with one condition than to treat a given number with another condition. After each round of scoring for each condition, the policy consequences of the ratings were fed back, to inform changes in scores made for the next round. Scores for the remainder of the 483 diagnoses were estimated by comparison with these 22 sample diagnoses, also by an expert panel (10). Diagnoses were then divided into seven classes of disability according to their scores. The prevalence of each disability class was calculated by summing the prevalences of diagnoses within that class (9). The types of condition included in each disability class are shown in Table 1.

Estimating dependency

It was assumed that there would be an approximate relationship between the class of disability and the need for care. For each disability class, the sample conditions used in the weighting process were considered, and a judgement made as to the frequency of care required. The judgements were generally uncontentious, but to verify them, a group of 20 health professionals was surveyed. The health professionals included nurses, doctors and physiotherapists from around the world, working in a British National Health Service hospital. The countries represented included Australia, Chile, Germany, Ghana, Jamaica, Myanmar, Nigeria, Norway, the Philippines, Sri Lanka, Ukraine and the United Kingdom. For each of the 22 conditions described, participants were asked to decide how often an adult patient would require human help with his or her personal, domestic or health needs, beyond that which would be expected for a healthy adult.

Statistical methods

The United Nations population data (7) for the year 2000 were regrouped to match the age ranges used in the estimates of the prevalence of disability. In addition, medium-fertility population projections for the years 2010, 2020, 2030, 2040 and 2050 were used. Stable disability prevalences were assumed, and the disability prevalences calculated for each country group were assumed to apply uniformly to each country within the group.

The combined prevalences for the two disability levels needing daily care (daily human help for personal, domestic or health needs, beyond that which would be expected for a healthy adult) were calculated and applied to current and future population data. Severely disabled children were included. As sensitivity analyses, the numbers of people with the three most severe levels of disability were estimated and projected, and the calculations using projections based on high and low fertility populations were repeated.

Table 1. **Twenty-two indicator conditions used to determine disability severity scores, with their disability classes, and the frequency of care needs as rated by health professionals**

Short description of condition	Disability class	Median dependency rating[a]
Active psychosis	7	1
Dementia	7	1
Quadriplegia	7	1
Severe continuous migraine	7	1
Blind	6	1
Paraplegic	6	1
Severe depression	6	1
Down syndrome	5	1
Mild mental retardation	5	1
Recto-vaginal fistula	5	2
Below-knee amputation	4	2
Deafness	4	2
Infertility	3	3
Fracture radius	3	2
Rheumatoid arthritis	3	2
Impotence	3	3
Angina after walking 50 m	3	2
Severe continuous sore throat	2	2.5
Anaemia	2	2
Diarrhoea	2	2
Severe thinness	1	2.5
Vitiligo	1	3

[a] 1, daily help; 2, weekly help; 3, less than weekly help.

The results were calculated as absolute numbers of dependent people; proportion of the total population who were dependent, and the ratio of the dependent population to the "working-age" population (total population aged 15–59 years). This represents a modified "dependency ratio". Many carers will be over the age of 60 (for example, elderly spouses), or in some cases will be children, and some working-age people will not be available for paid work (e.g. students). This index, however, gives a standardized measure of the call of the dependent population on the economy and the available labour force, both for informal and for professional care.

Results

Relationship between the need for care and disability level

People with any of the conditions in the two most severe disability classes (6 and 7) were considered to require help from another person at least daily. People with two of the three conditions in the third most severe disability class (5) were also rated as needing daily care (Table 1).

Prevalence of disabling conditions requiring daily care

The baseline position in 2000 was of a dependent population that comprised 4–5% of the total population, or 7–8% of the working-age population (see Table 2 for the broad country groups and Table 3 for illustrative individual countries). These results are

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Table 2. **Estimated numbers of people requiring daily care, proportion of total population requiring care, and dependency ratio, by country group and year, based on the two most severe Global Burden of Disease Study disability categories**

Region	Year	Dependent total (millions)	Total population (millions)	Increase in prevalence %	Proportion of total population %	Dependency ratio %
People's Republic of China	2000	65	1275	0	5.1	7.8
	2010	76	1366	18	5.6	8.3
	2020	89	1446	38	6.2	9.6
	2030	102	1485	57	6.9	11.6
	2040	109	1490	68	7.3	13.0
	2050	111	1462	70	7.6	14.0
Established Market Economies	2000	38	853	0	4.4	7.2
	2010	42	885	10	4.7	7.8
	2020	45	909	20	5.0	8.6
	2030	48	925	28	5.2	9.7
	2040	49	930	31	5.3	10.2
	2050	49	928	31	5.3	10.4
Former Socialist Economies of Europe	2000	17	338	0	5.0	7.9
	2010	17	322	0	5.3	7.9
	2020	17	308	0	5.5	8.9
	2030	17	290	−1	5.8	9.7
	2040	16	271	−4	6.0	10.8
	2050	16	252	−8	6.2	12.5
India	2000	52	1009	0	5.1	8.7
	2010	64	1164	23	5.5	8.8
	2020	77	1291	48	5.9	9.2
	2030	90	1409	74	6.4	10.0
	2040	102	1503	98	6.8	11.0
	2050	113	1572	119	7.2	12.1
Latin America and Caribbean	2000	23	519	0	4.4	7.3
	2010	28	594	23	4.7	7.5
	2020	34	664	47	5.1	8.1
	2030	40	723	73	5.5	8.9
	2040	45	771	96	5.8	9.8
	2050	49	806	115	6.1	10.6
Middle-Eastern Crescent	2000	27	622	0	4.4	7.8
	2010	35	755	29	4.7	7.8
	2020	44	899	62	4.9	8.1
	2030	55	1040	100	5.2	8.5
	2040	66	1167	140	5.6	9.1
	2050	77	1283	180	6.0	9.8
Other Asia and Islands	2000	37	798	0	4.6	7.7
	2010	46	918	24	5.0	7.9
	2020	56	1031	50	5.4	8.5
	2030	66	1131	78	5.8	9.3
	2040	76	1212	104	6.2	10.2
	2050	84	1274	126	6.6	11.1
Sub-Saharan Africa	2000	32	651	0	4.9	9.7
	2010	42	829	29	5.0	9.6
	2020	54	1041	67	5.2	9.6
	2030	70	1279	118	5.5	9.6
	2040	90	1523	181	5.9	9.8
	2050	115	1760	257	6.5	10.5

remarkably consistent across country groups with the exception of sub-Saharan Africa, where the baseline dependency ratio is 10%. Four main patterns of change are predicted over the next 50 years.

- Former Socialist economies of Europe. A mature population structure, with low and declining fertility, and relatively poor survival into old age, will lead to a decline in the numbers of dependent people. This reduction is predicted to be as much as 36% (Estonia), 32% (Bulgaria), and 25% (Ukraine) by 2050 . However, greater decreases in the working-age population over the same period mean that the dependency ratio will increase from 8% to over 12% (17% in Armenia). A similar pattern is expected in some western European countries where there is low fertility and a high life expectancy, such as Italy and Spain, where the prevalence of dependency is static, but dependency ratios are predicted to reach 13%.
- Established market economies. The number of dependent people will increase modestly (on average 31%) up to 2040, declining thereafter in some countries. The increases will be smaller in Europe and Japan (0–20%), and larger in North America and Australasia (about 60%). Dependency ratios will increase from 7% to about 10%, but will reach 13% in Japan.
- China and India will experience large increases in the prevalence of dependency to 2050 (70–120%). Dependency ratios will increase from 8% to 14% in China (16% in Hong Kong, Special Administrative Region) and from 9% to over 12% in India.
- Latin America and the Caribbean, the Middle-Eastern crescent, sub-Saharan Africa, and Other Asia and Islands. These countries are predicted to experience very large increases in absolute numbers of dependent people (on average 115 to 257% by country group). Burkina Faso, Congo, Liberia, Niger, Somalia, Palestine and Uganda will experience increases of over 400% (a five-fold increase). The predicted increase in Yemen is 581%. However, because the whole population in these countries is increasing, the increases in the dependency ratio will be more modest (from 7–10% to 10–11%). The dependency ratio in Yemen will remain static at 7.5%. However, Cuba and Singapore will see large increases in dependency ratio.

In the sensitivity analysis that included people in disability classes 5, 6 and 7, the estimates of prevalence and dependency ratios increased by approximately 50%.

Using low-fertility and high-fertility population projections had little impact on the estimates of dependency prevalence (because most of the people who will become dependent over the next 50 years have already been born). The range of possible increases in prevalence from 2000 to 2050 is 60–81% for China, 26–36% in established market economies, and 229–285% in sub-Saharan Africa. Fertility rates determine the size of the population that is of working age, so there is a much greater impact on the dependency ratio than on prevalence of absolute dependency. By 2050 the range (between high fertility and low fertility estimates) of possible dependency ratios is 12.9–15.8% in China, 9.7–11.0% in established market economies, 10.2–10.9% in sub-Saharan Africa, and 11.9–13.2% in Eastern Europe. Combining estimates for the wider range of disability levels and lower projected fertility gives dependency ratios for 2050 of 14.3–23.4% across regions.

Full data tables for WHO Member States have been published elsewhere (11).

Discussion

Large increases in the population of very disabled people are predicted for most parts of the world. This will necessitate the development of an infrastructure for health and social care with substantial capacity to support this population and their carers. The results of the present study emphasize that there is a considerable burden of disability associated with infectious diseases and trauma prevalent in the developing world as well as that associated with degenerative diseases in the economically developed nations.

Where large increases in the prevalence of dependency are not expected (i.e. in Europe and Japan) the proportion of severely disabled people will rise in comparison with both the total and working-age populations. Declining fertility means that there will be fewer people available either for generating wealth or for taking on professional or informal caring roles.

The estimates made in this analysis are primarily driven by predicted changes in future population size and age-structure and their validity depends on a number of assumptions.

Population projections

The projections of the numbers of people in the age groups in which most dependent people will be found are expected to be fairly accurate because most of the people who will become disabled over the next 50 years have already been born. Age-specific mortality changes quite slowly despite the effects of human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS) and of major socioeconomic disruption (12). In areas where mortality from HIV/AIDS is very high this would serve to increase the dependency ratios by reducing the denominator population. The historical demographic tendency to underestimate survival in old age will mean that the dependency ratios may have been underestimated.

Ageing of the elderly population (e.g. increases in the proportion of people aged over 80 years) will also lead to underestimates of the dependency ratio especially in the more economically and demographically developed countries, because the incidence of many disabling diseases (e.g. stroke and dementia) increases exponentially with age (13), and an upper age category of "over 60 years" was used in this study. An Australian study reported projections similar to those made above, but included data for more age-strata over 60 years. Estimates of the prevalence of disability for 2000 differ by 4%, but by 2030 the figures obtained in this study underestimate the Australian ones by 14% (14). The overall population structure depends more on fertility rates, estimates of which are prone to greater error. However, the sensitivity analyses showed that the range of likely changes in fertility do not qualitatively alter the conclusions made here.

Validity of the disability prevalence rates

Clinically and conceptually, it is not usual to infer disability from diagnoses (1). Disabilities at the personal level are limitations in the performance of tasks or activities that depend on much more than diagnosis alone. Moreover, the prevalences of disability calculated in this study were based on "preference weights" rather than on severity, which is more directly related to dependency. However, for the purposes of the present study these two concepts are closely related and, in the context of the types of condition considered, should have had little effect on the results. A small, though limited, validation study supported this assumption. Good empirical data on disability are available only from a few developed countries (e.g. 14–16), and

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Table 3. **Estimated numbers of people requiring daily care, proportion of total population requiring care, and dependency ratio for selected countries by year, based on the two most severe Global Burden of Disease Study disability categories**

Country	Year	Dependent total (millions)	Total population (millions)	Increase in prevalence %	Proportion of total population %	Dependency ratio %
Brazil	2000	7.7	170	0	4.5	7.1
	2010	9.3	191	21	4.9	7.5
	2020	11.0	211	43	5.2	8.2
	2030	12.8	226	65	5.6	9.2
	2040	14.2	239	84	5.9	10.1
	2050	15.3	247	98	6.2	10.9
Bulgaria	2000	0.42	7.9	0	5.3	8.5
	2010	0.40	7.2	−5	5.6	8.6
	2020	0.37	6.5	−12	5.7	9.3
	2030	0.34	5.9	−19	5.9	10.1
	2040	0.32	5.1	−24	6.2	11.7
	2050	0.29	4.5	−32	6.3	13.3
Japan	2000	6.1	127	0	4.8	7.7
	2010	6.7	128	10	5.2	9.3
	2020	7.0	126	14	5.5	10.3
	2030	7.0	121	15	5.8	11.3
	2040	6.9	116	14	6.0	12.9
	2050	6.6	109	8	6.0	13.4
Nigeria	2000	5.6	114	0	4.9	9.8
	2010	7.4	147	32	5.0	9.6
	2020	9.7	184	74	5.3	9.6
	2030	12.6	220	125	5.7	9.6
	2040	15.9	249	185	6.4	9.9
	2050	19.7	279	252	7.1	10.9
Syria	2000	0.65	16.2	0	4.0	7.4
	2010	0.90	20.8	38	4.3	7.3
	2020	1.2	25.5	82	4.7	7.5
	2030	1.5	29.3	136	5.3	8.1
	2040	1.9	33.1	190	5.7	8.9
	2050	2.2	36.3	243	6.2	10.2
United Kingdom	2000	2.7	59.4	0	4.5	7.4
	2010	2.9	60.3	8	4.7	7.8
	2020	3.1	60.9	15	5.0	8.6
	2030	3.2	61.3	22	5.3	10.0
	2040	3.3	60.4	23	5.4	10.4
	2050	3.2	58.9	21	5.4	10.7
USA	2000	11.6	283	0	4.1	6.6
	2010	13.3	309	15	4.3	6.9
	2020	15.4	334	33	4.6	7.9
	2030	17.2	358	49	4.8	8.6
	2040	18.3	379	59	4.8	8.7
	2050	19.3	397	67	4.9	8.9

the approach described here was necessary to enable estimates to be given for those countries where changes are likely to be greatest.

Homogeneity of country groups

The prevalence of disability was assumed to be similar across countries within each of the country groups. This may not be the case, e.g. the incidence of hip fracture and stroke varies twofold to threefold between different countries in Europe (*13*).

There are few empirical data comparing disability internationally, however. Heterogeneity is likely to be greatest in the "Other Asia and Islands" group, which includes well-developed economies and health systems, (e.g. Hong Kong, SAR and Singapore) as well as much less developed ones (e.g. Bangladesh and Mongolia).

Stability of disability prevalence

Fries hypothesized that the period between the onset of disability and death may be shortened (or "compressed") through

disease prevention, healthier lifestyles, improving social and economic conditions, and better health care (*17,18*) and some intervention studies (e.g. *19–21*) have shown that the risk of disabling diseases is not immutable, and that intervention can reduce disability (e.g. *22–24*).

The empirical evidence for compression of morbidity is mixed. The US National Long-Term Care surveys, reported that the age-standardized proportions of people aged over 65 years who were unable to perform at least one basic activity of daily living had declined by 3.6% over 12 years (*25*). Other studies failed to confirm this finding (*14,15,26*). Extending the benefits of compression of morbidity worldwide would be a major challenge in the face of the prevailing economic and social inequalities. Secular (time) trends in the prevalence of disabling disease are highly variable. In many developed economies, the trends in vascular disease and cancer are downward, but the numbers of osteoporotic fractures are increasing, and trends in incidence of other disabling diseases such as osteoarthritis, dementia, depression and macular degeneration are uncertain or constant. The incidence of disability related to infection with HIV, and that associated with smoking, will increase where the prevalence of these is high or increasing. Any planning on the basis of anticipated decreases in the prevalence of disability over time would be risky.

Relationship between level of disability and need for care

Mutual assistance is a social phenomenon. "Normal" and "abnormal" dependency overlap (*27*). In the American Longitudinal Study on Aging, the inclusion of respondents who said they received assistance, but had the capacity to perform a task themselves, increased disability prevalence estimates by 83% (*26*). Several studies, however, confirm the existence of a close relationship between severe disability and dependency (*2, 15, 28–30*).

The main analysis in this paper, included people with diseases at the severe end of the disability spectrum, including blindness, active psychosis, severe dementia, paraplegia, severe constant pain and severe depression. The assumption that people with these conditions will require daily care from another person should be valid across most countries and cultures, and will be largely independent of adaptations to the physical environment, care systems and traditions. Examples of conditions not included in the main analysis are mild mental retardation, below-knee amputation without a prosthesis, and angina after walking 50 metres. The sensitivity analysis using a wider range of disability levels gives estimates that probably include most people requiring daily help. However, some of the conditions included here will have an impact on dependency that is more culturally specific (e.g. the impact of amputation will depend on physical environments, artificial limb services and rehabilitation programmes).

Empirical validation of estimates

A few studies have measured population prevalences of dependency or severe disability. Exact comparison with estimates in this paper is difficult because of differences in age ranges, population age structure and in the disability thresholds chosen to determine inclusion in the study. For example, the definition used by the Australian Bureau of Statistics Surveys for "profound and severe core activity limitation" included an inability to use public transport, which would not in itself imply a need for daily care (*15*). Most reports give prevalences for disability or dependency in people aged over 65 years, which should be higher (in percentage terms) than the estimates from the present study for people aged over 60 years. This proves to be the case, but in general there is good correspondence between the estimates from the present study and those from the empirical studies. This study resulted in estimates of dependency for established market economies of 9.8% for men and 10.1% for women (14.8% for men and 14.6% for women in the sensitivity analysis). Studies from, Australia, France, Spain, the United Kingdom and the USA gave estimates of 12–20% (*2, 6, 14, 25, 26, 28, 30–32*). No validation data were available from non-established market economies.

Conclusion

The changes in the number of dependent people estimated in this study are large, and have the potential to put major pressure on health care and other support systems. Because of the assumptions made, the estimates presented here are approximate, but do suggest there is a strong case for more systematic collection of data on disability and dependency. Measures to prevent disability should receive increased priority, and maintenance and support services should be developed. ■

Résumé

Prévalence actuelle et future de la dépendance dans le monde, relation avec l'ensemble de la population et rapports de dépendance

Objectif Evaluer dans le monde le nombre de personnes ayant besoin d'une aide quotidienne pour les soins, les tâches domestiques ou les activités personnelles.

Méthodes Les données provenant de l'étude sur la charge mondiale de morbidité ont servi à calculer la prévalence des degrés d'incapacité sévère et donc d'évaluer la dépendance. Des projections démographiques ont été utilisées pour prévoir l'évolution sur les 50 années à venir.

Résultats Actuellement, c'est en Afrique subsaharienne (où le « rapport de dépendance » – proportion des personnes dépendantes par rapport à la population active – est d'environ 10 %, contre 7 à 8 % ailleurs), que le fardeau de la dépendance est le plus lourd. On prévoit que la prévalence va sensiblement augmenter en Afrique subsaharienne, au Moyen-Orient, en Asie et en Amérique latine, dans une proportion allant jusqu'au quintuple, voire au sextuple dans certains cas. Cette augmentation surviendra dans le contexte d'un accroissement démographique général, et les rapports de dépendance vont légèrement s'accroître pour passer à environ 10 %. L'augmentation du rapport de dépendance va être plus marquée en Chine (14 %) et en Inde (12 %) que dans d'autres régions où la prévalence augmentera sensiblement. Les pays à économie de marché bien implantés, en particulier les pays européens et le Japon, vont connaître une légère augmentation de la prévalence de la dépendance (30 %) ainsi que du rapport de dépendance (jusqu'à 10 %). Les anciens pays socialistes d'Europe vont enregistrer une stabilisation, voire une diminution du

nombre de personnes dépendantes en même temps qu'une forte augmentation du rapport de dépendance (jusqu'à 13 %).
Conclusion De nombreux pays vont être concernés de très près par l'augmentation du nombre de personnes dépendantes et devront trouver les moyens humains et financiers nécessaires pour les aider.

Il faudra améliorer très nettement la collecte des données sur les incapacités et les besoins des soignants. Prévenir les incapacités et apporter un appui aux soignants sont deux activités auxquelles il faudra accorder un rang de priorité plus élevé.

Resumen

Prevalencia mundial actual y futura de la dependencia, relación con la población total y razones de dependencia

Objetivo Estimar el número de personas que hay en todo el mundo que requieren la ayuda diaria de otra persona para cuidar de su salud y para realizar las tareas domésticas o personales.

Métodos Se usaron los datos del Estudio de la Carga Mundial de Morbilidad para calcular la prevalencia de los niveles graves de discapacidad y para estimar sobre esa base la dependencia. A partir de las previsiones demográficas se proyectaron los cambios que se producirán durante los próximos 50 años.

Resultados La mayor carga de dependencia recae actualmente en el África subsahariana, donde la «razón de dependencia» (proporción de personas dependientes respecto a la población en edad de trabajar) es aproximadamente del 10%, frente al 7%-8% de otros lugares. Se prevén grandes aumentos de la prevalencia en el África subsahariana, Oriente Medio, Asia y América Latina, de hasta 5 o 6 veces en algunos casos. Estos aumentos se darán en el contexto de unas poblaciones generalmente en aumento, y las

razones de dependencia aumentarán ligeramente hasta alrededor de un 10%. Esa variable aumentará más en China (14%) y la India (12%) que en otras áreas con grandes aumentos de la prevalencia. Las economías de mercado consolidadas, especialmente Europa y el Japón, experimentarán aumentos moderados de la prevalencia de dependencia (30%) y la razón de dependencia (hasta 10%). En las antiguas economías socialistas de Europa la población se mantendrá estática o en declive, pero la razón de dependencia aumentará considerablemente (hasta un 13%).

Conclusión Muchos países se verán enormemente afectados por el número cada vez mayor de personas dependientes y tendrán que hallar los recursos humanos y financieros necesarios para ayudarles. Es preciso mejorar sensiblemente la recopilación de datos sobre la discapacidad y sobre las necesidades de los cuidadores, y hay que dar más prioridad a la prevención de la discapacidad y la prestación de ayuda a los cuidadores.

ملخص

المعدلات العالمية الحالية والمستقبلية لانتشار الاعتماد على الغير على الغير، وعلاقتها بإجمالي عدد السكان، ونسب الاعتماد على الغير على الغير

الغرض: تقدير عدد السكان على المستوى العالمي المحتاجين إلى مساعدة يومية من غيرهم للقيام بالمهام الصحية أو المنزلية أو الشخصية.

الطريقة: استُخدمت المعطيات المستقاة من «الدراسة العالمية لعبء المرض» لحساب معدل انتشار المستويات الوخيمة للعجز، ومن ثَــمَّ تقدير معدل انتشار الاعتماد على الغير. واستُخدمت التوقُّعات السكانية للتنبؤ بالتغيُّرات المتوقَّعة في الخمسين عاماً القادمة.

الموجودات: تتركز معظم أعباء الاعتماد على الغير حالياً في بلدان جنوب الصحراء الأفريقية، حيث تصل ' (نسبة الاعتماد على الغير (نسبة السكان المعتمدين على غيرهم منسوبة إلى إجمالي السكان الذين هــم في ســن العمل) إلى حوالي ١٠٪، بالمقارنة مع ٧ ٨٪ في سائر المناطق. ويُتوقع حدوث زيادة كبيرة في معدلات انتشار الاعتماد على الغير في بلدان جنوب الصحراء الأفريقية، وللـشرق الأوسط، وآسيا، وأمريكا اللاتينية، قد تصل إلى خمسة أو ستة أضعاف في بعض الحالات. ويُتوقع حدوث هذه الزيادات في ظل التزايد العام في عدد

السكان، كما يُتوقع زيادة نسبة الاعتماد على الغير زيادة طفيفة إلى حوالي ١٠٪. ويُــتوقع أيضاً أن تزداد نسبة الاعتماد على الغير في الصين (١٤٪)، وفي الهند (١٢٪) أكثر من المناطق الأخرى ذات الزيادة العالية في معدلات انتشار الاعتماد على الغير. أما بلدان اقتصاد السوق، ولاسيَّما أوروبا واليابان، فسوف تشهد زيادات طفيفة في معدل انتشار الاعتماد على الغير (٣٠٪)، وفي نسبة الاعتماد على الغير (تصل إلى ١٠٪). وأما البلدان الأوروبية الاشتراكية سابقا فسوف تشهد ثباتاً أو انخفاضاً في عدد السكان المعتمدين على غيرهم، ولكنها ستشهد زيادات كبيرة في نسبة الاعتماد على الغير (تصل إلى ١٣٪).

الحصيلة: يُتوقع أن تتأثـَّر بلدان عديدة تأثـُّراً كبيراً من جراء زيادة عدد السكان المعتمدين على غيرهم، وسوف تحتاج هذه البلدان إلى تخصيص موارد بشرية ومالية لدعم هؤلاء السكان. وسوف يستلزم الأمر مزيداً من جمع المعطيات عن العجز وعن احتياجات مقدِّمي الرعاية. كما ينبغي إيلاء أولوية أكبر للوقاية من العجز وتقديم الدعم لمقدِّمي الرعاية.

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