

WORLD HEALTH ORGANIZATION
REGIONAL OFFICE FOR EUROPE



WELTGESUNDHEITSORGANISATION
REGIONALBÜRO FÜR EUROPA

ORGANISATION MONDIALE DE LA SANTÉ
BUREAU RÉGIONAL DE L'EUROPE

ВСЕМИРНАЯ ОРГАНИЗАЦИЯ ЗДРАВООХРАНЕНИЯ
ЕВРОПЕЙСКОЕ РЕГИОНАЛЬНОЕ БЮРО

Meeting on the Study on Trends in the Demographic
Structure in the European Region: Health and
Social Implications

Berne, 22-26 March 1982

ICP/MCH 025(3)/12
7 January 1982

ENGLISH ONLY INDEXED
(Unedited)

*Demographie - Trends
Age de
Social conditions*

EFFECT OF THE MAIN DEMOGRAPHIC TRENDS ON ELDERLY PEOPLE (60 YEARS AND OVER)

by
E. Heikkinen
Department of Health Sciences
University of Jyväskylä, Finland



Study on Trends in the Demographic Structure in the European Region:
Health and Social Implications

Effect of the main demographic trends on elderly people (60 years and over)

by

Eino Heikkinen

Department of Health Sciences
University of Jyväskylä, Finland

Introduction

The purpose of this presentation is to explore in the light of the main demographic trends the statistical and research data on the status and prospects of old people in various European countries. Some developmental trends in the state of living of the elderly appear to be rather similar in most of the countries. Urbanization, industrialization, development of production, differentiation between occupations and other well known changes have created social and cultural conditions which direct the way of life of the elderly in the same direction. This includes e.g. the development of pension systems and comprehensive social welfare services, change of family type in the direction of smaller family-households, increasing social mobility and growing demand for new cultural and leisure activities.

On the other hand the European countries are at varying stages of industrialization and urbanization. The percentages of people aged 65 years and over varies from about 10 to about 14 % between different geographic areas (Table I) and in some countries the proportions of the aged are already about 17 %. The percentage of rural dwellers aged 70 years and over of the total population varies greatly between the different regions of Europe (Table II). Elderly persons are commonly overpresented in rural areas in highly industrialized countries. According to the available predictions the proportion of the urban population will increase by about 10 percent unit from 1975 to 2 000. The change will be greatest in Southern and Eastern Europe.

Table I

Table II

Variations in cultural traditions have marked influences on the living conditions of the elderly. Expanding development of public services and other forms of social policy is claimed to weaken traditional primary structures. This is seen e.g. as changes in the function of family in the context of systems of care, according to the state of historical development of a given country (see Amann 1981).

In addition, the social, political and economic restructuring which has occurred in the socialist countries has greatly affected all societal institutions and thus also the living conditions of old people. Provisions for the successful solution of health care and well-being of the elderly are made by the constitution of the socialist countries of Eastern Europe. Also different geographical circumstances influence the solutions which are adopted in the care of the elderly.

A major problem in the exploration of the state of living of the elderly is the scantiness of cross-national studies and consequent difficulties in doing comparative analyses on the effects of demographic changes on the living conditions of the older members of the populations. Only the rough outlines of various developmental trends can therefore be presented and even their interpretation is rendered difficult by great variations in ideologies, the state of historical and social development of a given country and by differences in the organizational approaches used to meet the needs and demands of old people.

Changing patterns of needs and interests. The situation of the elderly populations in the industrialized countries is continuously changing in relation to the economic and cultural development of those societies. Marked differences exist in various aspects of life between generations. People born in the beginning of this century have experienced great economic and social progress which has reduced poverty and in many ways improved living conditions. These people commonly express their satisfaction as to this development and the majority of them reported when interviewed substantial satisfaction with life. The younger generations on

the other hand which were born into and have lived in welfare states, subjectively seem to perceive great problems in the organization and quality of their lives.

The members of every new generation realize their lives on the basis of their own experiences and in the framework of the current situation in which they are living. Differences between the needs and interests of the cohorts are great and also within one cohort social disparity tends to increase with advancing age. It should be noticed that variations in health status, social integration, maintenance of income, need of services etc which are observed in old age between different persons are not causally related to old age but rather is the end result of an individual's entire life-course.

Retirement is reported to accentuate the difference and highlight the especially disadvantaged categories, the ill-protected, the small farmers and agricultural workers, the small firms in industry and commerce, and persons in service occupations, who obtained compensation allowances only very late. The position of women, and particularly of very old women, is even worse. (see Amann 1981). Each new generation which attains retirement age can be expected to be better educated, healthier and functionally more capable of various activities than the previous ones. Some research data on the other hand suggest that differences in the prevalence of certain common diseases between various social classes have not diminished during recent decades even through the general health status of the investigated populations may have improved (e.g. Blaxter 1976). These and other similar observations emphasize the necessity to direct societal measures towards the prevention of ill health and social deprivation long before old age in addition to the measures which are specifically developed for the care of the elderly.

One positive consequence of the changing age structure has been an increase in research work devoted to the solution of the problems of the aged. Several aspects of the situation of the elderly have been investigated in most of the European countries. The most common questions which have been analysed deal with housing conditions, income maintenance, social integration, health status, need for services, and overall satisfaction with life. On the basis of research knowledge it has been possible to define "risk groups" which have then become objects for the various activities of service systems.

Housing. The housing situation of the elderly includes questions on the standard of housing, characteristics of household compositions, and effects of neighbourhood and environment on the well-being of the elderly (e.g. Carp 1976, Die gesellschaftliche Reintegration älterer Menschen in Österreich 1976, Boalt and Åhlund 1978, Dieck 1979).

Most of the elderly persons (80-90 %) live independently in their own households. In Sweden e.g. about 90 % of people aged 65 and over live in ordinary apartments and in Finland about 85 % of the elderly (65+) live in ordinary houses. Of the older age groups the figures for those living in institutions or in houses specifically constructed for the elderly are markedly higher. Of the age group 85-89 years old in Sweden about 60 % live in their own households.

The standard of housing of old people has improved continuously but still the average standard is lower compared to the standard of housing of the younger generations. The situation partly reflects cohort differences: new independent generations generally start from a higher standard of housing than the previous generation. A below average standard of housing is particularly seen in rural areas and in the central areas of larger cities. There are, however, exceptions like Greece where major problems of housing are found in big cities while in rural areas it has been reported that there are no acute housing problems for old persons (Zarras 1980).

Data about the housing preferences support the generally expressed view that old people want to live in their own homes, in a familiar neighbourhood and in close contact with their relatives and friends.

The changes which have occurred in most of the European countries have increased the number of one-person households (particularly among elderly women), lengthened the distances between parents and children, forced the elderly to move to new environments. These processes will still continue in the future with likely harmful effects on the elderly if new societal measures are not developed. It has been estimated (see Amann 1981) that about one-quarter of the over-65s live in one-person households in several Western European countries. In Eastern European countries 9-17 % of persons aged 60 and over are living alone (Lakiza-Sachuk 1977).

Family today still plays an important role in the social relationships of the elderly. Certain European countries like Poland nearly 70 % of people aged 65 and over who have children live with them. Also in some other socialist countries e.g. Bulgaria, Romania and USSR (particularly in the Republics of the Caucasus and Middle Asia) the extended families are still common (Chebotarev et al. 1981). In the more industrialized countries the corresponding figures are lower: 42 % in Great Britain and 20 % in Denmark (Piotrowski 1977). In the European part of the USSR the proportion of the extended families is only 10-20 %. In Poland even outside agriculture, the proportion of old persons living with children is more than 50 %, and older people are more willing to live with children than in many Western European countries. In Poland the number of the elderly living with a relative is 76 % among peasants, 58 % among workers and 55 % in the group of employees (Chebotarev et al. 1981). In the Netherlands less than 2 % of older people wish to live with their children (Munnichs 1977). In many societies the elderly prefer to maintain separate households from those of their relatives but at the same time they want their relatives to live close enough for regular contacts to be possible ("Intimacy at distance").

Most countries have developed measures and service systems to improve the housing conditions of the elderly in order to increase their independence and to prevent premature institutionalization. These include renovation programmes for old houses, sheltered dwellings and a range of auxiliary supportive measures. It is now widely recognized that appropriate housing conditions and the quality of the environment have greater importance for the

continuity of life among the elderly compared to younger persons. In fact, many problems of the elderly could be solved by improving their standard of housing and insuring access to service systems. In countries like Sweden where intensive programs have been developed to improve the housing conditions of the elderly, 90 % of them can live in ordinary dwellings even though the percentages of people aged 65 and over is one of the highest in Europe.

Because there are no good reasons to assume that there would be any significant return to traditional extended-household families the countries which are still at lower level of urbanization could perhaps learn from the experiences of their industrialized counterparts provided that careful cross-national comparative studies can be carried out.

Social integration and mode of life. The social networks and cultural activities of the elderly have undergone marked changes during recent decades. A new social role of pensioner has developed and on a macrosocial level the formation of a subculture of the elderly can be seen with their own clubs, associations and political organizations. Some features of this restructuring of the social networks of the elderly may be antagonistic towards the rest of the society if the elderly feel that their justified demands are not respected.

About one-quarter to one-third of old people feel loneliness and anomia, and are socially isolated or have too little communication and contacts. The majority of the elderly can, however, maintain social activities and interests at the same level which they attained during their earlier course of life (e.g. Schmitz-Scherzer 1976, Cutler 1977). Official social participation and activities outside the home seem to decrease and unofficial social participation and activities at home to increase with advancing age. The elderly who belong to the higher social classes and have long education are more involved in social activities and cultural interests than the others.

Adaptation and training to retirement have begun one of the important issues in social gerontology. In an international comparative study which concentrated on the life styles of retired

teachers in seven countries and steel industry workers in four countries it was observed that post retirement life continued very much in the same way as before but the tempo was slower (Havighurst et al. 1972). There seem to be an increasing need to prepare elderly workers for retirement and specific programs have been developed for that purpose in different countries. The aim of the preparation to retirement is to raise the level of adaptation to a new period of life and to prevent disadaptation and pathological aging.

The average life-expectancy at the age of 65 is already as long as the period of growth and the length of this period presumably will become even longer, if the current decline in the mortality rate of the elderly continues and if the retirement age is lowered. Educational program are also needed for the retired persons to prevent them from social isolation and to activate them to participate in various spheres of social life.

Very little is known about the content and changes in the mode of life of retired persons. Their mode of life can be considered as a complex of various forms of behaviour and their activity in the different spheres of life peculiar to a certain social and economic structure. The concept also includes the satisfaction of needs, human relations, thinking, and subjective life expressions.

The studies carried out thus far have usually been focused on limited aspects of the mode of life, e.g. life satisfaction and living habits. It has been shown that general life satisfaction is correlated with social participation, socio-economic conditions, and level of health (e.g. Graney 1975, George 1978, Cutler 1976, 1977).

Age differences between various living habits have been analysed in several studies which have shown e.g. that physical activity tends to decrease with advancing age and also that the prevalence of smoking is lower among the elderly compared to younger people (Cunningham et al. 1968, Heikkinen et al. 1976, Heikkinen 1977) Possible changes in living habits during the historical development of the societies studied have not been investigated and cross-national studies are totally lacking. Some observations suggest

that even old people are able to modify their behaviour if cultural developments, for example new health education programmes, force behavioral changes. This is seen e.g. as an increased interest in physical training among the elderly in the industrialized welfare states like the Nordic countries and West Germany.

Solidarity among family members seems still to be high and the family has maintained the major part of its economic, protective and emotional functions. About 80 % of the elderly in several European countries have children living no more than a half-hour's walking or driving distance away. Data of this kind do not, however, tell us anything about the quality of family relations which presumably have changed together with the changed functions of the family. Some research findings suggest that the development of special services for the elderly (about 30 different service categories in several countries) may lead to a situation in which children are less interested in helping their parents. In Finland a growing number of old people seem to prefer assistance from the official services instead of receiving help from children. How future social policy can maintain a proper balance between the resources of the professional services and resources of the family is a question which has important implications also on family relations.

Health and functional ability. The development of the health status of the elderly is not well known. The lengthening of life-expectancy at the age of 65 has been slow (Table III) but is presently more than 15 years for women and more than 13 years for men in several European countries. There is also a declining mortality among the aged population (Table IV) and some recent findings suggest that, particularly during the last few years, the mortality of the elderly has declined rapidly.

The picture of the health status of the elderly depends on the method of examination. In careful clinical examination about 9 diseases per person was found in a population aged 75 on average (Brückel 1975). On the other hand the average number of diseases

which require medical treatment is about 2.5 per person in a population aged 65 and over (e.g. Kalimo et al. 1980). In survey studies the prevalence of certain diseases (e.g. heart insufficiency) is commonly higher than that observed in clinical examinations and some other diseases can be diagnosed only through clinical examination (e.g. Ruikka et al. 1966, Bergener et al. 1979, Svanborg et al. 1980). The majority of the diseases of the elderly comprise chronic conditions. Apparently the elderly change their aspiration level in their thinking about health and accept some symptoms and degenerative states as belonging to normal ageing because 30 to 40 % of old people feel themselves healthy (e.g. Shanas et al. 1968, Tornstam 1975).

The assessment of functional abilities of the elderly is important in order to provide them with adequate services and rehabilitative measures. Low functional status is a problem particularly among very old women, and, because their number is constantly increasing, this problem will require more attention in the future both in research and social practice.

The health status of the elderly and their perception of health may be assumed to vary between different cultures and in relation to the level of service systems but generalisations on this question are not possible on the basis of the present research data. In Yugoslavia in a group of urban persons aged 60 and over about 70 % had three or more chronic diseases according to an interview study. In one town in the USSR about 54 % of persons aged 60-64 years had three or more chronic conditions and in the age group 75-79 years the corresponding figure was 92 % according to medical examination (see Chebotarev et al. 1981).

Health and social services. During recent decades we have seen a rapid development of services in most European countries aimed at meeting the needs of the growing number of old people (e.g. Amann 1980). In several countries the proportion of resources allocated to the health care of the elderly is more than 50 percent of all health care expenditures. The use of services among the aged is 3-4-fold compared to their proportion in the population.

This situation has raised several important questions: how will the health status of the elderly develop in the future? What can be done to prevent premature disability and institutionalization? How should resources be divided among the different forms of health and social services, among families and among the elderly themselves? What factors can predict the development of the health and well-being of the elderly?, etc. Research work on these questions is going on in many countries and policies for the aged are being planned and implemented to meet the most acute needs of the aged.

The main principle in the development of services is integration, which means that services intended for all members of society should in the first place, also satisfy the needs of the elderly. The actual development of services has, however, led to the increasing number of services specifically planned for old people (see Chebotarev and Sachuk 1979, Eitner 1979, Amann 1981). The rationale of this development lies in the processes of aging which create new and complex demands for service systems and also in the rapid changes in the environment which require the elderly to adapt beyond their capability to do so without outside assistance. The result has been a tendency towards a more and more marked differentiation and compartmentalization of the range of services offered (Amann 1981). Various attempts have been made to systematize services in order to be able to respond as effectively as possible to the living conditions of the elderly when providing services (e.g. Coward 1979, Holmes and Holmes 1979).

One model for the systematization of services is built up on changes in roles with aging, on the needs of the elderly, and on the liberation of old people's own mental and physical resources. Four different categories of services emerge from the analyses: a) services preserving the continuity of life style. These are services subserving basic vital needs like housing, health, information and work opportunities, b) compensating services which help the elderly in coping with the activities of daily life and in communicating with the outside world, c) life enhancing services which try to satisfy needs of a higher order and aim to

motivate a search for the new (opportunity creating services) and d) care services when health and functional abilities are lost.

This model implies a necessity to develop the service systems by interlocking various forms of services to a flexible totality which can respond to the unique needs of every individual old person. Elderly people are not a homogeneous group but display marked internal differentiation. People are generally old on the basis of age changes after they reach 75 years when the processes of aging start to manifest themselves in various bodily tissues and functions. Before attaining that age people may incur disability but this is mainly due to symptoms caused by a variety of diseases which in principle do not belong to normal aging. On reaching the age of 75 years there is a progressive development of general impairment, loss of working capacity and in some cases loss of ability for self-servicing (see Chebotarev et al. 1981). The need for periodic or continuous outside assistance to the elderly is steadily growing.

Recent demographic data indicate that in several countries the proportion of 60-74-year-olds is stagnating whereas the proportion of old people (75+) is rapidly increasing. The percentage of persons aged 80 and over of persons aged 60 and over increases from 10 % to 14 % between 1960 and 2000 (Table V). The health status of "young olds" (60-74-years-olds) is supposed to improve in the future and the main target for services will be persons of great age who often have multimorbidity and serious limitations in functional abilities (particularly old women).

Table V

The systems of services have also in the future to deal with problems of social disparity among the elderly. Education, previous professional status, localisation of dwelling, household composition and family relations, level of income etc influence the well-being of old people in a complex manner. There also seem to be class-specific barriers of perception and access to as well as utilization of services (see Amann 1981).

Medical, social and psychological factors combine in a reciprocal relationships to determine the development of the health and

functional abilities of the elderly. Any system of services will probably fail if it is not able to understand an old person as a totality comprising all the above mentioned dimensions. The service system has also to achieve a balance between the privacy of old people and the active provision of services to those who objectively are in need of them but for various reasons do not utilize them.

An aging population: a burden or a resource? An aging population would scarcely matter from the economic and social point of view if the behaviour or attitudes of the members of the population were not closely linked with age (UN 1956). Past and future demographic trends suggest that most European countries are almost stationary as regards generation replacement. Many states are moving towards a very low level of mortality and in particular there has been a sharp decline in mortality among the very old (Guilmot 1978). The dependency-ratio (proportion of people aged 0 - 14 + proportion of people aged 60 and over of the population aged 15 - 59) will still decrease slightly in many countries during the last decades of this century because the increase in the proportion of the elderly has not yet offset the fall in the proportion of young people (Table VI). It can be assumed that this drop in the dependency-ratio will make it possible to increase productivity provided that available resources are effectively utilized (e.g. Guilmot 1978). The situation may, however, change when the large generations born after the war reach retirement age.

The current high unemployment of several Western European countries may cause increased tension between the economically active and older population groups. The older labour force is criticized for its lack of mobility, rigidity and the outdated nature of its education. Gerontological research has shown that the processes of aging do not automatically lead to a decline in performance in all physiological functions, and that in several psychological and social tasks older workers,

TABLE VI

by means of experience and watchfulness, manage better than younger ones (Rosenmayr and Rosenmayr 1978).

Predictions concerning the participation of persons aged 65 and over in the labour force suggest that the present proportion of active men in that category will fall from about 25 % to about 12 % by the year 2000. In many countries, e.g. Finland, the proportion of economically active older persons (65+) is presently only about 5 %. Opposite trends have also been reported, as for example in the USSR where the level of pensioners' employment has increased over the past decade while attempts have been made to facilitate the working conditions of older people (Chebotarev and Sachuk 1979). There are also in the USSR large regional differences in the proportion of workers active in production during the first pensionable 5-year period: 50-60 % in the Baltic Republics and 15-20 % in the Republics of Middle Asia.

In the future the industrialized and urbanized societies will more and more face the problem of how to maintain meaningful social roles for the elderly and how to create services to help old people not only to cope with the activities of daily life, but to enable them to utilize their personal mental and physical resources for their own self-development and, in consequence, for the benefit of society at large. How we will succeed in this task will depend on social, economic and cultural development in the different societies. In some countries there seem to be problems even in the provision of basic material security for the elderly, in some others the problems centre more on the spiritual needs of the aged.

To promote discussion this presentation concludes with a number of critical and even provocative statements about factors which are thought to be crucial in determining the development of health and mode of life among old people:

1. The European societies are not sufficiently prepared to face and handle the challenges which are brought about by the ageing of their populations.

2. Views on the past condition of the elderly tend to be romantic and over-optimistic. In several countries the prevalence of extended families has not been as common as usually assumed and many of them have contained serious psycho-social problems. On the other hand the problems of the present day elderly are either over-emphasized or their capacities and possibilities are regarded with an unrealistic optimism.
3. Gerontological research and training program should be strengthened. Current research work does not correspond with the need for new knowledge on the processes of ageing and importance of the problems of the aged. In medicine, for example, the allocation of resources to gerontological research is minimal even though the elderly are the main consumers of medical services. Training in gerontology and geriatrics is insufficient to provide medical and social work personnel with adequate knowledge, a positive attitude and proper skills to serve old people and to develop appropriate service systems. With regard to the processes of ageing and the situation of the elderly the principle of evolution should be adapted to research and training.
4. The condition of the elderly is a complex question which is inextricably bound up with all spheres of social life. Therefore a long-term policy should be tailored for each society, comprising the physical, psychic and social dimensions of the life of the elderly. The policy should not only deal with the questions of the contemporary aged. Ageing per se is not a reason for anything; an old person is simply the end result of an entire life-course. The goal should be a meaningful life-span for everybody. All possible efforts should be undertaken to level the distinctions between people in their living environments by minimizing harmful effects and maximizing positive and regenerative influences.
5. One of the central issues is how to provide meaningful social roles for the elderly and how to help them in the maintenance of a positive image of self and an optimistic view of the world. Progress in these questions may require re-evaluation of basic philosophical thinking.

about old age. Instead of labelling old people as old-fashioned and incompetent they should be understood as a continuously developing social resource which has value even to younger generations. Instead of reducing old people to medical and social problems they should be re-defined as multiple human beings who possess life experience and wisdom as a social inheritance to be passed on to the rest of the society.

References

- Amann, A.(1980) On Problems, Trends, and Measures. In: Amann, A.(Ed.)
Open care for the Elderly in Seven European Countries. A Pilot Study
on the Possibilities and Limits of Care, Oxford
- Amann, A.(1981) The status and prospects of the aging in Western Europe.
European Centre of Social Welfare Training and Research, Eurosocial
Occasional Papers 8.
- Bergener, M., Husser, J., Kähler, H.D.& Mehne, P.(1979) Die gesundheitliche
und soziale situation älterer Menschen in der Großstadt. Schriftenreihe
des Bundesministers für Jugend, Familie und Gesundheit, Band 74, Stutt-
gart, Verlag W. Kohlhammer
- Brückel, K. W.(1975) Krankheit und Alter. In: Grundzüge der Geriatrie.
München-Berlin-Wien, Urban & Schwarzenberg
- Blaxter, M.(1976) Social class and ^{/health} inequalities. In: Carter, C.O. & Peel,
J.(Eds.) Equalities and inequalities in health. London, Academic Press,
111-125.
- Boalt, G. & Åhlund, O.(1978) Socialmed. Tidskr. 55(10), 562-567.
- Bourgeois-Pichat, J.(1979) La science de la population au service d l'homme.
Conference sur la science au service de la vie. Institut de la Vie,
Vienna.
- Carp, F. M.(1976) Housing and living environments of older people. In:
Binstock, R.H. & Shanas, E.(Eds.) Handbook of aging and the social
sciences, New York, Van Nostrand Reinhold Company, 244-268.
- Chebotarev, D.F. & Sachuk, N.N.(1979) J.Am.Geriatrics Society, 27, 49-57.
- Chebotarev, D.F., Sachuk, N.N. & Verzhikovskaya, N.V.(1981) Status and
Condition of the Elderly in Socialist Countries of Eastern Europe.
Contribution to the ¹⁹⁸²World Assembly on Aging.
- Coward, R.T.(1979) The Gerontologist, 19, 275-282.
- Cunningham, D.A., Montoye, H.J., Metzner, H.L. & Keller, J.B.(1968)
J. Gerontology, 23, 551-556.
- Cutler, S. J.(1976) J. Gerontology, 31, 462-470.
- Cutler, S. J.(1977) J. Gerontology, 32, 470-479.
- Die Gesellschaftliche Reintegration ältere Menschen in Österreich(1976)
Veröffentlichung des Bundesministeriums für Wissenschaft und

- Dieck, M.(1979) Wohnen un Wohnumfeld älterer Menschen in der Bundesrepublik. Bedingungen des Wohnens älterer Menschen in der Bundesrepublik. Schriftenreihe des Deutschen Zentrum für Altersfragen e.V. Altersforschung für die Praxis. Band II, Heidelberg.
- Eitner, S.(1979) Z. Alternsforsch. 34, 197-200.
- George, L.K.(1978) J. Gerontology 33, 840-847.
- Graney, M.J.(1975) J. Gerontology 30, 701-706.
- Guilmot, P.(1978) The demographic background. In: Council of Europe. Population Decline in Europe. Implications of a Declining or Stationary Population. London, Edward Arnold.
- Havighurst, R.J., Munnichs, J.M.A., Neugarten, B. & Thomae, H. (1972) Adjustment to retirement. A cross-national study. Assen, Van Gorcum & Comp. N.W. Dr. H.J. Prakke & H. M. G. Prakke.
- Heikkinen, E., Käyhty-Seppänen, B. & Pohjolainen, P.(1976) Scand. J. Soc. Med. 4, 71-74
- Heikkinen, E.(1977) Gerontological Aspects of Physical Activity. In: Harris, R. & Frankel, L.J. (Eds.) Guide to Fitness After 50, New York, Plenum Press.
- Holmes, M.B. & Holmes, D.(1979) Handbook of human services for older persons. New York, Community Research Applications, Inc.
- Kalimo, E., Klaukka, T. & Nyman, K.(1980) Health and health care of elderly population in Finland. In: Geron XXII Yearbook 1978-79. Helsinki, Societas Gerontologica Fennica, 65-74.
- Lakiza-Sachuk, N.N. (1977) Loneliness of the elderly - socio-demographic aspect. In: The Elderly in Our Country. Moscow, Statistika Publ.
- Munnichs, J.M.A. (1977) Linkages of Old People with their Families and Bureaucracy in a Welfare State, the Netherlands. In: Shanas, E. & Sussman, M.B. (Eds.) Family, Bureaucracy, and the Elderly, Durham, N.C. 92-116.
- Piotrowski, J.(1977) Old People, Bureaucracy, and the Family in Poland. In: Shanas, E. & Sussman, M.B.(Eds.) Family, Bureaucracy, and the Elderly. Durham, N.C., 165

- Rosenmayr, L. & Rosenmayr, H. (1978) Der Alte Mensch in der Gesellschaft.
Hamburg, Reinbek.
- Ruikka, I., Sourander, L.B. & Kasanen, A. (1966) Ann. Med. Sci. Fenn. Series A.
V. Medica 120.
- Shanas, E., Townsend, P., Wetterburn, D., Friis, H., Milhøj, P. & Stenhower,
J. (1978) Old people in three industrialized societies. London,
Routledge & Kegan Paul.
- Schmitz-Scherzer, R. (1976) Contr. Hum. Dev. 3, 127-136.
- Svanborg, A. et al. (1980) Läkartidningen 77, 3729-3786.
- Tornstam, L. (1975) The Gerontologist 15, 264-270.
- United Nations (1956) The ageing of populations and its economic and social
implications. Population Studies 26, New York
- Zarras, J. (1980) Greece. In: Palmore, E. (Ed.) International Handbook of
Aging, Westport-Conn., 172.

TABLE I Percentages of persons aged 65 and over in Europe:
 situation in 1975 and perspectives to the year 2000
 (Bourgeois-Pichat 1979).

Region	1975	1985	2000
Europe, total	12.1	12.3	14.2
Eastern Europe (except USSR)	11.4	10.8	13.2
Northern Europe	13.7	14.7	14.6
Southern Europe	10.4	11.2	14.2
Western Europe	13.6	13.3	14.9
USSR	8.9	9.6	12.0

TABLE II Percentages of rural dwellers aged 70 years and over of the total population and proportions of urban dwellers of all persons aged 70 years and over in 1975 and predictions in 2000.

	EUROPE		EASTERN EUROPE		NORTHERN EUROPE		WESTERN EUROPE		SOUTHERN EUROPE	
	1975	2000	1975	2000	1975	2000	1975	2000	1975	2000
percentages of rural dwellers aged 70+ of total population	2.51	2.00 (-0.41)	3.18	2.87 (-0.31)	1.45	0.99 (-0.46)	2.07	1.50 (-0.57)	2.68	2.31 (-0.37)
repartition of urban population	63.1	72.2 (+9.1)	51.0	62.8 (+11.8)	78.9	85.1 (+6.2)	72.9	80.6 (+7.7)	49.9	64.1 (+14.2)
5+ people aged 0+	69.6	78.3 (+8.7)	56.8	68.8 (+12.0)	85.6	91.6 (+6.0)	78.2	86.3 (+8.1)	55.5	69.2 (+13.7)

source: UN Population Projects: World population and its age-sex composition by country, 1950 - 2000. Demographic Estimation and Projection as Assessed in 1978.

TABLE III Mean life-expectancy at the age of 65 at the beginning of the 20th century and in 1970's in various European countries. The increase in the life-expectancy in years is also given

Country	Year	Male Mean life- expectancy	Increase	Women Mean life- expectancy	Increase
Finland	1901-10	10.8		11.9	
	1978	12.3	1.5	16.3	4.4
Sweden	1901-10	12.8		13.7	
	1978	14.2	1.4	17.7	4.0
Norway	1901-10	13.5		14.4	
	1977-78	14.3	0.8	17.7	3.3
Denmark	1901-05	11.9		13.0	
	1977-78	13.9	2.0	17.6	4.6
Iceland	1901-10	11.7		13.4	
	1977-78	16.2	4.5	18.9	5.5
The Netherlands	1900-09	11.6		12.3	
	1977	13.9	2.3	18.0	5.7
Belgium	1891-1900	10.6		11.6	
	1968-72	12.1	1.5	15.3	3.7
Scotland	1891-1900	10.5		11.5	
	1971-73	11.9	1.4	15.2	3.7
Italy	1901-11	10.7		10.8	
	1970-72	13.3	2.6	16.2	5.4
France	1898-1903	13.3		14.6	
	1977	13.7	0.4	17.9	3.3
Germany	1901-10	10.4		11.1	
German Democratic Republic	1976	12.2	1.8	14.8	3.7
Federal Republic of Germany	1976-78	12.6	2.2	16.2	5.1

Source: Statistical Yearbook of Finland 1980, Central Statistical Office of Finland, Helsinki, 1981.

TABLE IV Mortality in various age groups of the elderly in 1930's and 1970's

Country	Year	Sex	Mortality per 1000 population					
			60-64	65-69	70-74	75-79	80-84	85-
Finland	1930-32	M	34.1	47.0	67.4	95.6	125.5	159.5
		F	22.4	33.3	56.3	89.8	135.7	189.0
	1977	M	29.0	43.4	64.1	96.0	149.3	222.3
		F	11.0	18.0	32.4	59.2	99.1	190.6
Sweden	1930-32	M	21.9	34.3	53.5	81.1	147.4	253.0
		F	18.9	30.5	50.3	58.7	100.0	182.8
	1976	M	18.2	30.0	50.0	80.8	128.3	230.8
		F	9.2	14.8	27.2	50.6	91.7	187.6
Norway	1930-32	M	20.7	32.0	48.8		123.8	
		F	15.9	26.2	42.6		116.1	
	1977	M	17.7	29.6	48.2	78.2	114.1	210.9
		F	8.3	14.6	25.7	48.3	85.7	174.8
Denmark	1930-32	M	22.9	37.9	60.0	119.1		259.4
		F	21.1	34.4	58.6	116.8		249.4
	1976	M	21.7	33.9	53.4	84.4	125.1	227.5
		F	11.4	17.9	30.4	51.7	88.9	184.7
Iceland	1940	M	19.3	32.1	54.2		121.8	
		F	12.5	24.0	41.0		112.7	
	1977	M	14.2	22.0	42.2	57.3	95.9	169.2
		F	6.1	13.2	26.4	33.8	83.2	141.0
The Netherlands	1930-32	M	22.2	36.1	59.1		131.4	
		F	21.0	33.6	56.4		126.5	
	1977	M	20.2	33.6	52.4	78.1	116.1	194.3
		F	8.9	14.8	25.5	46.8	80.3	164.4
Belgium	1930-32	M	29.1	45.1	70.8		151.2	
		F	22.6	36.6	59.0		133.8	
	1976	M	25.8	42.1	64.0	98.9	150.0	246.6
		F	11.2	19.4	34.8	63.6	108.8	208.1
Bulgaria	1933-36	M	26.0	39.5	55.5		119.4	
		F	21.4	34.6	51.9		115.5	
	1976	M	21.1	35.4	58.2	95.9	146.5	235.7
		F	13.0	23.5	41.2	76.9	129.8	207.5
Spain	1929-31	M	37.4	52.1		144.8		
		F	27.1	36.8		139.0		
	1970	M	19.9	32.4	52.2	83.7	132.1	201.3
		F	10.5	18.5	33.0	61.4	105.2	195.6

Country	Year	Sex	Mortality per 1000 population					
			60-64	65-69	70-74	75-79	80-84	85-
Ireland	1930-32	M	35.2	42.6	80.0		112.1	
		F	33.2	39.3	66.7		104.0	
	1975	M	25.2	39.4	60.7	91.6	145.4	239.9
		F	13.9	22.8	38.9	65.0	117.0	219.0
England and Wales	1930-32	M	29.2	46.5	74.4		149.9	
		F	21.4	33.8	55.5		128.7	
	1976	M	24.9	40.3	65.1	100.7	153.5	249.9
		F	12.6	19.8	33.7	58.1	103.8	201.4
Italy	1930-32	M	26.1	40.7	67.3		145.2	
		F	21.4	35.3	59.6		135.5	
	1976	M	21.4	34.5	54.7	88.7	135.7	232.5
		F	10.0	17.1	30.0	58.7	107.9	199.1
Austria	1930-32	M	31.7	47.1	73.4		150.8	
		F	24.4	39.1	65.8		147.4	
	1976	M	23.4	39.5	64.8	102.0	149.1	251.6
		F	11.3	19.5	35.4	65.2	118.0	224.1
Portugal	1930-32	M	29.7	45.9	74.0		155.6	
		F	20.1	32.3	56.6		140.8	
	1975	M	24.5	37.6	58.5	101.2	178.3	338.4
		F	11.2	19.6	35.2	72.2	138.2	259.1
Poland	1933-34	M	35.5	57.5	76.4		145.5	
		F	27.2	40.4	66.8		134.5	
	1977	M	26.0	40.3	63.3	95.5	144.4	203.9
		F	12.4	20.2	35.7	62.7	109.1	174.9
France	1930-32	M	33.0	50.1		123.0		
		F	21.6	35.4		103.0		
	1976	M	20.4	34.0	53.9	89.2	140.3	251.3
		F	8.1	14.4	25.5	49.3	91.5	202.0
Germany	1937	M	26.7	41.8		102.2		
		F	21.6	36.0		97.1		
German Dem. Rep.	1976	M	23.8	39.8	66.3	105.3	161.4	283.6
		F	12.6	22.4	41.2	73.5	129.6	248.9
Fed. Rep. Germany	1977	M	23.0	37.6	61.8	94.4	142.8	228.6
		F	10.9	17.9	32.5	58.8	104.7	196.5
Scotland	1930-32	M	30.5	49.1	77.1		154.6	
		F	24.1	36.7	60.9		137.3	
	1977	M	28.5	42.8	67.5	104.1	150.9	239.7
		F	14.7	22.8	36.5	60.6	102.1	185.8

Country	Year	Sex	Mortality per 1000 population					
			60-64	65-69	70-74	75-79	80-84	85-
Switzerland	1930-32	M	33.2	50.9	76.2		154.8	
		F	23.8	39.6	65.0		141.8	
	1977	M	17.9	31.6	47.9	77.3	122.3	212.6
		F	8.1	13.8	24.9	47.2	84.7	177.1
Czechoslovakia	1930-32	M	30.2	48.0	68.9		145.0	
		F	24.3	40.4	64.3		134.3	
	1975	M	27.7	44.8	71.2	109.3	168.5	268.2
		F	13.3	22.9	41.5	74.5	126.9	227.1
Hungary	1930-32	M	30.0	46.3	74.1		160.2	
		F	25.3	41.9	66.8		150.8	
	1977	M	26.7	42.1	68.5	107.0	161.3	251.9
		N	14.4	24.3	41.8	73.7	123.2	219.6
The Soviet Union	1967-68	M	27.8	39.1			81.0	
		F	12.6	20.4			60.7	

Source: Statistical Yearbook of Finland 1980, Central Statistical Office of Finland, 1981.

TABLE V Increase in the number of very olds in different regions of Europe. Development from 1960 to 1970 and prediction to 2000. Percentages of persons aged 80+ of persons aged 60+

R e g i o n	Y e a r				
	1960	1970	1980	1990	2000
Europe	9.9	10.6	12.5	14.5	13.4
Eastern Europe (Excluding USSR)	8.2	8.6	11.2	13.3	11.2
Northern Europe	11.2	11.7	12.7	15.1	16.5
Southern Europe	9.7	10.9	11.5	13.4	13.1
Western Europe	10.3	11.1	14.1	16.1	13.5
USSR	9.6	10.1	11.9	14.0	12.7

Source: UN Population Projects: World population and its age-sex composition by country, 1950 - 2000. Demographic Estimation and Projection as assessed 1978.

TABLE VI Dependency ratios in different regions of Europe. Development from 1960 to 1970 and predictions to 2000 (population aged less than 15 + population aged 60 and over per 100 population aged 15 - 59)

R e g i o n	Y e a r				
	1960	1970	1980	1990	2000
Europe	67.3	71.1	64.4	63.4	66.9
Eastern Europe (Excluding USSR)	68.6	67.4	63.0	66.1	65.0
Northern Europe	68.1	73.7	69.1	64.4	66.2
Southern Europe	65.2	54.8	65.4	65.2	48.8
Western Europe	67.8	74.0	62.1	59.2	66.8
USSR	68.8	68.3	59.7	67.5	70.2

Source: UN Population Projects: World population and its age-sex composition by country, 1950 - 2000. Demographic Estimation and Projection as assessed 1978.