

Alter - Vieillesse - Anziani - Ageing

Main results and findings from the National Research Program (NRP 32)

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Introduction

This study reports the main results and conclusions emerging from the research projects of the National Research Program NRP 32 'Ageing'. The National Research Program (NRP 32) 'Ageing' comprises 28 research projects in the following five areas.

1. The status and activities of pensioners in society,
2. The social and economic situation of older people,
3. Retirement and transition to the post-professional phase of life,
4. Health and sickness in old age
5. New forms of treatment and care for the elderly.

This study¹ can only touch upon some of the research results and conclusions, other proposals require much closer attention. As ageing is a topic that affects us all, questions related to ageing may be best solved by means of democratic discussion.

Within the framework of an active policy in favour of elderly and old people, we can identify three main objectives which may be placed under the three following headings:

1. Autonomy: to preserve and reinforce the autonomy of older² and elderly people in their everyday lives.
2. Solidarity: to increase mutual help and solidarity between various generations and among various groups of older people (e.g. healthy versus disabled elderly people, etc.).
3. Participation: to preserve and reinforce the active participation of older men and women in the social life of our society.

In Switzerland, the proportion of pensioners is increasing, as the birth rate has been decreasing since the mid-1960's. Given the baby boom generation produced few children, the ageing of this generation will lead to demographic ageing in the population. In recent decades, there has also been a process of demographic ageing from the top of the population pyramid, as life expectancy in over 65-year-old women and men has significantly increased. This process is likely to continue in the future with the number of extremely old people will rising rapidly. Switzerland, like other European countries, is therefore faced with a twofold process of ageing: on the one hand, the proportion of older people is increasing as a result of a decline in births.

On the other hand, the number and proportion of extremely old people are rising due to increased life expectancy.³

¹ There is a comprehensive, scientific final report of NRP 32 in book form: François Höpflinger, Astrid Stuckelberger (1999) *Demographische Alterung und individuelles Altern. Results from the National Research Program 'Alter / Vieillesse / Anziani / Ageing'*, Zurich: Seismo-Verlag; French: *Vieillissement démographique et vieillesse individuelles*, Geneva: Georg

² For the purposes of this study the following classifications were used: Elderly: 65-74 years old, Old: 80+ years, very old: > 85 years.

Principles of modern gerontology

Modern gerontology is faced with a twofold revolution: on the one hand, gerontology boasts enormous advances. On the other hand, the situation and status of older people are changing. In many ways, today's pensioners experience a different kind of ageing from pensioners in earlier times. Gerontologists are faced with the challenge of rapid changes in both the science and the social reality of ageing. Thus, in recent decades, five central points have emerged:

1. Observations that are made about the elderly today tell us little about the future character of ageing.
2. The situation and well-being of older people have improved in many ways in recent decades.
3. Women and men of the same age show great differences in all areas; there is no such thing as a typical pensioner.
4. Human ageing can be actively shaped to a large extent, and in the case of elderly and extremely old people there are considerable, as yet unexploited, opportunities.
5. Negative and false images of old age influence the situation, and zest for life, of older people in a negative way. They contribute to the fact that older people have a low level of esteem in our society.

A) Status and activities of older people in our society

1 Views of old age

In a certain sense we can speak of a paradox of ageing: socially and culturally speaking, extreme old age is the youngest of all phases of life, as, on the whole, our ancestors did not live so long. It is for this reason that our society does not have yet a positive culture for old people. In many ways, today's society has yet to adapt to the longevity of modern man.

A detailed analysis of views of ageing reveals six clichés⁴:

A first view refers to the alleged loneliness, isolation and dependence of old people, combined with a presumed lack of autonomy, and low mood. This view of old age corresponds to the traditional model of old age as one of deficiency.

A second view of old age revolves around the inability to adapt, and cognitive losses: 'Older people are not aware of current trends, they are no longer 'in', they have problems with their memories and are often disorientated.' 'Conservative and disorientated' are two prejudices appearing frequently in one form or another; for example, when the 'senile elderly' are mentioned, or when it is feared that demographic ageing will lead to a conservative society.

³ For scenarios regarding population development see: Federal Statistical Office (1996) Szenarien zur Bevölkerungsentwicklung der Schweiz 1995-2050, Berne: Federal Statistical Office (incl. CD Rom version).

⁴ Patricia Roux; Pierre Gobet; Alain Clémence, et al. (1994) Stereotypes et relations entre générations, final report of the NRP 32, Project 4032-35701, Lausanne (mimeo.).

Whereas the first two views stress the supposed deficits of old age, the third image is more positive. It is characterized, on the one hand, by an emphasis on activities in old age ('Old people are frequently active, and they benefit from retirement in order to develop new activities'), and on the other hand, by reference to their position as intermediaries between the generations ('They enjoy the contact with other generations').

As well as the image of an active old age, there is still the traditional picture of a 'restful old age'. Thus the cliché of 'retiring' still lives on, but it faces increasing competition from the image of an active old age. The current discrepancy between retirement and active ageing is apparent to today's pensioners insofar as they frequently stress both aspects (active ageing and a 'restful' old age).

In addition to the four views of old age presented so far, there are two further, less significant, clichés: the equation of old=sick is still with us, and the desire for a 'wise old age' (although it is unclear what wisdom actually represents).

The contradictory combination of the positive and negative concepts of old age is striking, both in the eyes of the young and older. Here the existential ambiguity of a phase of life is reflected, which although offers chances for development, indubitably involves increased health risks. It is especially older men and women who are directly confronted with this ambivalence of ageing. Older interviewees, therefore, stress both the negative and positive images of old age. The coexistence of positive and negative images of old age, however, points to a gradual change in the image of old age in our society. Negative concepts of age are increasingly being questioned and, at least, supplemented by positive models of successful ageing. Combating false or obsolete concepts of old age is one task for gerontology.

2 Social participation and voluntary activity in older people

The increasing number of healthy, well-trained and competent older people raises questions with regard to the social and socio-political activities and commitments of pensioners: to what extent can and should pensioners make a useful contribution to society? To what extent is there an active senior citizens movement, and what could the socio-political contribution of such a senior citizens movement be? Such questions are touched upon particularly in discussions on solidarity between the generations. A new social contract was proposed in the 1995 report 'Ageing in Switzerland': "The tighter financial resources become, and the higher the proportion of pensioners to the adult population, the more it becomes imperative to use the wasted knowledge and skills. For there are more and more tasks that are essential for society without there being paid jobs for them." (p. 566).

Indeed, a great deal is happening in the area of social and socio-political activities of older people, not least because generations with new values are reaching retirement age. At the same time, it has become apparent that there are very few clear models for the commitment of older people. Today's pensioners find themselves in the position of time pioneers, needing to conquer new territories, piece by piece. What must simultaneously be avoided is the exclusion of older people, for example by 'age limits' from political, social and cultural activities.

In order to analyze voluntary activity in old age, a study was carried out by the Research Institute for Association and Non-profit Management at the University of Fribourg . The aim was to record the opportunities and potential for voluntary work by pensioners on the basis of a concrete example ('Senior citizens help senior citizens'). Organizational factors which promoted or impeded voluntary work by pensioners were also assessed⁵.

On the one hand, it became apparent that the voluntary work done by the 'young old' is already at a level that cannot be ignored. A general withdrawal of this age group would leave tangible gaps in our society. This leads us to identify the germs of two approaches towards voluntary work: (1) an altruistically orientated approach emanating from a selfless commitment to society; (2) a rational-economically driven approach, which considers voluntary work to be a rational process of exchanging resources (time, skills), even if this is not financially regulated. Presumably the discussions between the two approaches in the voluntary sector will intensify in future as there is a growing tendency to judge voluntary work according to economic criteria.

On the other hand, it is also apparent that there is considerable unmobilized potential in this age group. A survey carried out in 1995 with 1,555 older employees and 2,600 retired employees from large Swiss companies showed striking discrepancies between the general willingness to commit themselves and their actual social commitment: before retirement, over 60% of the interviewees were relatively sure that they would be willing to engage in social sectors after retirement if offered an interesting and meaningful activity. In reality, only 18% of the retired employees were actually engaged in voluntary work⁶.

On the whole, there is a considerable gap between the general willingness to help and the voluntary work actually done by older people. Special efforts and organizational measures are needed in order to involve retired people more fully in voluntary activities.

Recommendations for the promotion of voluntary activity in senior citizens⁷

1. To compile an easily understood, clearly constructed corporate image, defining the role of the voluntary worker in the organization. The role of the voluntary worker as well as his/her contribution are to be clearly defined. The assignment of voluntary workers is to be integrated into a long-term performance plan.

⁵ Cf. Hans Lichtsteiner (1995) *Freiwilligenarbeit im Alter. Analysis and measures for the promotion of voluntary work in non-profit organizations*, Zurich: dissertation

⁶ Cf. Achim Brosziewski; Peter Farago; Peter Gross; Claude Hunold; Olaf Zorzi (1997) *Altenpolitik schweizerischer Unternehmen und ihr Beitrag zum Übergang vom Ewerbs- zum Rentnerleben und zur sozialen Integration betagter Erwerbstätiger*, St. Gallen: final report (NR Project 4032-33699).

⁶ Cf. Hans Lichtsteiner, *Freiwilligenarbeit im Alter. Analysis and measures for the promotion of voluntary work in non-profit organizations*, Zurich 1995.

2. To integrate clearly the voluntary worker in the establishment and operational organization of the institution. This includes the development of a management plan for voluntary workers, listing the tasks, skills and responsibilities of voluntary workers. In this way, unnecessary conflicts between full and honorary staff may be avoided.
3. To arrange an introductory scheme for voluntary workers. A systematic introduction, and instruction would give the voluntary workers the necessary feelings of confidence that they can cope with the tasks set. In addition, integration of new voluntary workers in the organization is facilitated. The first impression gained by the voluntary workers affects their relationship with the organization and is a decisive factor as to whether the commitment is short or long term.
4. To adapt tasks to the needs and interests of the voluntary workers as far as possible. The tasks given to voluntary workers are to be individually chosen, and attractive. An attractive task means, above all, that the voluntary workers have the possibility of making a contribution, of learning and experiencing something new.
5. To represent the interests of voluntary workers vis-à-vis the State or the general public. Commitment on behalf of the voluntary workers signals that their concerns and their contribution are taken seriously.
6. To conduct joint advertising campaigns for the recruitment of voluntary workers. If organizations from different spheres join together in a campaign of this kind, potential voluntary workers may be offered work in various spheres. This can be particularly advantageous in the recruitment of newly retired women and men who are ready to commit themselves but do not yet have a concrete idea of the form and content of their commitment.
7. To divide up the work offered to volunteers. Pensioners have different concepts of voluntary work: some understand voluntary work rather as an altruistic act, others are primarily interested in social contacts and an exchange.
8. To create a system of incentives that is tailored to the target group in the case of voluntary work. Among these incentives there could be the right to take advantage of the same service oneself if required (reciprocity). The creation of new social contacts can also be an important incentive (maybe furthered by get-togethers, shared journeys or courses, etc.). In the long term, active voluntary workers should have a right to continued and further adult training so that the retired can extend their social and technical skills within the scope of voluntary work.

3. Senior groups and pensioners clubs – en route to a senior citizens movement?

Demographic and social changes not only lead to a social preponderance of older people but also to more active planning of the post-professional phase. To this extent, senior associations gain increased significance. The form, objectives and activities of today's senior groups are enormously varied (as illustrated by a corresponding NRP 32 study).⁸ Besides groups and

⁸ The results of this study were published in both French and German. French version: Jean-Pierre Fragnière, Dominique Puenzieux, Philippe Badan, Sylvie Meyer (1996) *Retraitées en action. The social commitment of senior groups*, Lausanne: Réalités Sociales, German version: Dominique Puenzieux; Jean-Pierre Fragnière; Philippe Badan; Sylvie Meyer (1997) *Bewegt ins Alter. The social commitment of senior groups*, Zurich: Seismo.

associations which attend to and defend the interests of the retired, there are groups which primarily look after the organization of leisure and entertainment. Other groups concern themselves with education and culture (e.g. universities of the third age), or offer services for seniors or other groups of people. In Switzerland as a whole, there is no directory of senior groups and their membership levels. However, it can be estimated that approximately one-quarter of all AHV (Old Age and Survivors Insurance) pensioners are members of some kind of senior group, pensioners association or pensioners club (the majority of these members are more passive than active members). A minority of retired people is active in a socio-political sphere or one connected with ageing. It is striking that a great deal is happening in this sphere of Swiss society. Each year, new senior groups are created while others disband, gradually fall asleep or amalgamate. The senior citizens movement is currently a lively scene, which can in no way be considered as consolidated. Undoubtedly, greater importance is being attached to senior organizations; particularly because today's generation of pensioners comprises men and women with highly developed technical and social skills.

Senior groups and senior citizens movement in Switzerland: Questions and attempts at answers.

1. Is there an actual senior citizens movement in Switzerland?:

If the question refers to a uniform movement which brings a certain message into public discussion, the answer is: No. At present, the colourful variety of the various groups is important; they cultivate their individuality, value their independence. Motions and activities are mostly developed at local level. In the last ten years, however, there has been a tendency towards mutual arrangements or amalgamations. The consciousness of a common world of retired people is being created in the most diverse groups; sometimes as a result of spontaneous enthusiasm, sometimes for practical reasons. Moreover, it is not uniformity that brings life into the movement, but rather a form of co-operation that has room for differences.

2. Are pensioners groups something new?:

A policy on ageing has developed gradually this century. There is clearly a shift from the mere care of needy old people towards planning their lives after retirement. For a long time, the fight for the AHV and its further development were central to the development of pensioners groups. Slowly but surely, the pensioners organizations grew, but there was no clear boom until the mid-1980's. At the moment, every fourth pensioner is a member of a senior citizens association or a pensioners club. Active pensioners are still a minority; but a minority that is becoming more evident and stronger. After all, many social and cultural innovations that have changed society have been triggered by minorities.

3. Is there really the threat of a 'grey' danger through the political preponderance of pensioners?:

Alarming visions of a 'domination of the old' are frequently based on the wrong fundamental facts. Investigations refute the idea that older people only represent their own interests and appear as a uniform block of voters. Political differences are not extinguished on reaching retirement age, and the interests of various groups of older people vary enormously. A strong 'party of the old' is not likely. The common goal of older people is to be recognized by society and to safeguard their material existence. A massive political mobilization of pensioners is only to be expected if the present system fundamentally endangers social security or if older people are faced with public discrimination.

4. Does a stronger senior citizen movement not lead to generation conflict?: Strengthening relationships between the generations is a central concern of many senior groups. The promotion of solidarity between the generations is an aim of many senior citizen associations and an increasing number of senior groups is actively interested in co-operation with the younger generations. If there are tensions between the generations, this is hardly due to committed senior groups. Conflicts between generations usually arise on the basis of ignorance, isolation or passivity, combined with prejudice about the young and the old.
5. Who takes a leading position in a senior group?:
Some senior groups rely to a large extent on experienced and prominent persons who have already exercised a leading function in professional life. At the same time, there is a parallel tendency to give a chance to people who have hitherto not had much opportunity to show their abilities and take up such positions. At the moment, it is the men who play a leading role on the boards of many groups. And it is mostly men that one sees in the front row at public events. However, an increasing number and proportion of women are becoming actively engaged. In old age, more and more women are using skills which up until now have been underdeveloped. In view of women's longer life expectancy, as well as rising levels of education, it is clear that women are also going to take an increasingly central part in the senior citizens movement.
6. How do you see the social commitment of pensioners in the future?:
In the two past decades, the senior citizens movement has been characterized by an intensified dynamism, an enormous variety and clearly increased skills. As new generations reach retirement age, this development will continue. An intensified political and socio-political orientation of many senior groups (some of which are discussing radical social restructuring) will probably also continue. The various groups, clubs and associations will still not, however, make a united stand and will thus not form a homogenous block. But they will point health-care and social work in a new direction by pursuing new ideas and will participate in their implementation within the scope of their activities.

4. Research with and by older people

The development of universities of the third age into active educational and research institutions combined with a rising number of retired specialists is beginning to have an effect on the shaping of age research. Why should research only be carried out about older people? Why not research with and by older people themselves? These questions are becoming louder as more older women and men no longer see themselves just as passive research objects but as active subjects.

These new trends were consciously applied within the scope of the National Research Program (NRP 32). Detailed discussions were held both on the framework conditions for successful co-operation between young researchers and retired specialists, and on the possibility of gerontological research by older people.⁹ Two research projects were specifically conceived as research with, or by, older people.

⁹ Thea Moretti-Varile (ed.) (1996) *L'implication des personnes âgées dans la recherche*, Lausanne: Réalités Sociales.

Thus, in co-operation with the ATTE (Associazione Ticinese Terza Età), a qualitative analysis was carried out on the loneliness experienced by widowed women in the Ticino. The older people taking part not only conducted the interviews under the guidance and methodological expertise of a young researcher, but were also actively involved in the planning of the study and later in the processing of the results.¹⁰ A research group from the University of the Third Age in Geneva also participated in the National Research Program 'Ageing'. With the help of qualitative interviews – which were carried out and evaluated by retired women and men – it was possible to record the processes of adaptation to age, widowhood and loneliness in their whole complexity. The papers and publications of this research group have contributed to the sophisticated treatment of an otherwise neglected topic – the widowhood of women and men and their adaptation to life afterwards.¹¹

Experience so far shows that research carried out by retired women and men can be successful. However, a few conditions are necessary for this success: firstly, a core group of active people must be able to work over a relatively long period of time and conduct longer-term research projects. Individual research is possible in certain spheres (e.g. local history), but most scientific topics can only be dealt with by teams today. Secondly, the groups need good specialized and methodological support, as neither qualitative nor quantitative analyses are possible without up-to-date knowledge of the subject and methods. Co-operation between young and senior researchers functions best if the common aims and motivation for research have been discussed and clarified before the actual research work begins. Thirdly, certain research questions and procedural methods are better suited than others to the active participation of older people.

Thus, in the current research on ageing it is primarily a question of qualitative research, often of a local character. As far as gerontological projects, initiated and executed by senior citizens, are concerned, these are frequently orientated towards the biographies of those taking part, which means that qualitative interviews are preferable to standardized ones. Moreover, many of these interviews take the form of action-orientated projects. Interestingly, senior researchers choose research methods propagated by the students movement of the 1970's.

In any case, conducting research not only about older people but working together with them within the sphere of gerontological projects is valuable.

Main results and perspectives

Prejudices and negative views of old age continue to put a strain on older people's zest for life. Although there is an increasing number of more positive models showing successful ageing,

¹⁰ Thea Moretti-Varile (ed.) (1996) *Solitudine no... ma tristezza. Vissuti ed esperienze raccontate da un gruppo di vedove*, Giubiasco: Associazione ticinese terza età.

¹¹ Cf. Groupe 'Sol' de l'Université du 3e âge de Genève (1992) *La solitude, ça s'apprend! L'expérience du veuvage racontée par celles qui la vivent*, Geneva: Georg, as well as Groupe 'Sol' de l'Université du 3e âge de Genève (1996) *Vivre sans elle. Le veuvage au masculin*, Geneva: Georg.

false and distorted views of old age remain tenacious. A policy on ageing, therefore, needs to confront prejudices about old age. Gerontology also has the task of refuting false views of ageing through its results. Only in this way can the systematic discrimination of older people be prevented.

Today, many pensioners already do socially meaningful voluntary work thereby contributing to social prosperity. However, there is still a considerable, as yet untapped, potential for voluntary activities on the part of pensioners. In many spheres, organizational measures are necessary to promote the commitment of older people. At the same time, we should avoid measures which restrict the social participation of older people by means of 'age limits'.

Since the 1980's, many senior groups and clubs have experienced a new boom, with the result that the senior citizens movement is characterized by increased dynamism, greater variety and level of skills. As a new generation reaches retirement age, this development will continue. Within this framework, co-operation between age researchers and older people will also be increasingly significant.

B) Retirement and transition to the post-professional phase

1. Developments in the labour market

The incorporation of a regulated post-professional phase in the life of the majority of older people is a new development. In 1960, 59% of men aged 65-69 years old were still gainfully employed. Only in recent decades has the employment of older people become an exception. In recent decades, moreover, there has been an increased trend towards early retirement in many European countries. Thus, employment rates have lowered viz. those of men aged 60-64 and partly also of 55-year-old men. Rising unemployment, as well as economic restructuring, have additionally kindled this trend. However, hopes of solving the problem of youth unemployment by forcing early retirement have not been fulfilled. In contrast, this strategy has contributed to the disadvantage of older employees.

In Switzerland, the trend towards early retirement occurred relatively late in comparison to other European countries. Up until now, compared to other countries, Switzerland has significant numbers of older employees still taking a very active part in working life.¹² One factor contributing to this trend is that State old age insurance is still relatively strictly tied to fixed age limits. There was little discussion regarding flexible retirement options until the 1990's.

Whereas the numerical ratio between the younger and older working population is at present more or less balanced, there will be a rapid shift in the direction of a noticeable demographic ageing of the labour force in the next few years. By the year 2010, there will still be 77 persons aged 20-39 for every 100 men and women aged 40-64 years old. Subsequently, at least from a demographic point of view, the working population will remain largely in the hands of older wage earners. Thus, in future, structural change in the economy will take place

¹² Cf. Jean-Marie le Goff (1999) *Les trajectoires des travailleurs âgés sur le marché du travail en Suisse et en Europe*. Lausanne: Réalités Sociales.

less via the entry of young adults into professional life. On the contrary, economic change will have to be increasingly supported by middle- and old-aged employees. The demographic future of the labour market will cause three fundamental long-term changes in opposition to current cycle-induced labour market trends.

Firstly, our future economy can no longer afford the prejudicial treatment and discrimination of older employees. Secondly, higher and further education, and professional training, of those employees over forty, must be promoted. Thirdly, the current move towards early retirement is not tenable. In the long term, even a rise in retirement age is not inconceivable, because in this way relationships between the working population and pensioners will be improved. We should, however, see that each rise in retirement age additionally increases the demographic ageing of the labour force. From the point of view of the labour market and social policy, a rise in retirement age is therefore only meaningful if there is a guarantee that the additional older wage earners remain employed. A rise in retirement age would in any case have to be accompanied by measures promoting further training and leading to a reduction in age-related discrimination.

2. Policies on ageing in Swiss companies

A research project at the University of St. Gallen headed by Prof. Peter Gross addressed the policy of Swiss enterprises regarding the question of retirement. Both large Swiss-German companies and employees before and after retirement were interviewed.¹³

1. Do Swiss companies have a corporate development plan for elderly employees?: Corporate development plans for elderly employees only exist in exceptional cases. On the whole, it is large companies which, within the framework of, or following the formulation of their corporate image, have elaborated the relevant parts to develop a policy on ageing. Formulated policies concerning future pensioners are mostly aimed at regulating the transition to retirement age. Besides legal matters, they also comprise health and social aspects. Where plans do exist, they are supplemented by corresponding opportunities for relevant courses and guidance.

In most enterprises, however, there are no systematic guidelines for a policy on ageing.

Whether and how much preparation for retirement and guidance is offered mostly depends on the human resources staff's awareness of the problems and their initiative as well as their ability to assert themselves with regard to mobilizing the necessary funds. In practice, there are numerous forms, ranging from individual quasi-social worker counselling, buying in courses and services to the setting up of more or less well-devised in-house services.

2. How are models of flexible retirement age assessed and what fringe conditions do the companies see for new forms of activities in old age?: From the companies' point of view the most important factors in the assessment of flexibility models at present are the economic situation, shaped by cyclical and structural upheavals, and discussion about new

¹³ Achim Brosziewski; Peter Farago; Peter Gross; Claude Hunold, Olaf Zorzi (1997) *Altenpolitik schweizerischer Unternehmen und ihr Beitrag zum Übergang vom Erwerbs- zum Rentnerleben und zur sozialen Integration betagter Erwerbstätiger*, St. Gallen: final report, May 1997 (NR Project 4032-33699).

models of working hours. Flexible retirement age is seen as one element of a general effort towards acquiring more flexibility in the sphere of (life) working time which should allow the companies to adapt to rapidly changing markets. Provided they serve this goal, corresponding measures are basically welcomed.

The practical application is, however, faced with obstacles. Among these are the provisions of insurance law, which leave the companies little room for manoeuvre. Moreover, cultural aspects play a role that can not be underestimated: the increase in autonomy on the part of the employed person accompanying a systematic introduction of flexible retirement age as well as rising demands on personnel management (e.g. greater scope for medium-term staff planning) may lead to a restraint that is more related to management problems than to the company's principle of flexible retirement ages.

3. What is the significance of a corporate policy on ageing and the concrete activities of the companies for older and former employees?: Preparatory courses supporting transition from active professional life to retirement are of great importance for employed persons of pensionable age. They offer concrete help in legal, financial and health-related matters. In addition, they enable future pensioners to examine the new situation with others of the same age, mostly with their own partner. Today's generation of pensioners appreciates opportunities for regular contact with other ex-employees organized by their former employers. The future will show whether this will still be the case when retirement age is reached by generations for whom the ties to the company had already played a less important role during their working life.

The demand for courses and other activities during the transition to retirement age exists irrespective of the size of the company. As, however, only large companies are able to satisfy this demand themselves there is a need for corresponding facilities elsewhere. These do exist and if employees learn about them they are often keen to take part.

3. Transition to retirement

At the University of Fribourg, a research group under Prof. Hans-Dieter Schneider investigated the situation of employees both six months before and six months after retirement. There was a third survey a year later (i.e. 18 months after retirement) assuming that important processes of adaptation would have taken place by this time.¹⁴

The level of well-being in the Swiss population shortly before retirement is high and hardly falls following retirement. Nevertheless, we can name certain risk factors which may lead to a deterioration in the condition of future pensioners. In addition to social status, their social network is particularly important for a sense of well-being. Finally, personality factors – such

¹⁴ Cf. Regula Buchmüller, Sabine Dobler, Tina Kiefer, Frank Margulies, Philipp Mayring, Markus Melching, Hans-Dieter Schneider (1996) *Vor dem Ruhestand. A psychological investigation of experience during the time before retirement*, Berne: Huber; Regula Buchmüller, Sabine Dobler, Philipp Mayring, Hans-Dieter Schneider (1997) *Übergänge in den Ruhestand, A longitudinal psychological investigation of retirement experience, final report*, Fribourg (mimeo.).

as optimism and emotional stability – are also important. Whereas measures combating the prejudicial treatment of women and the lower socio-economic classes must be primarily taken by means of legal regulations, it is up to the social institutions to promote strong social networks: it must be their aim to further social skills in each age group, ensuring institutionalized opportunities for social activities in order to prevent social isolation.

The question of approaching retirement is a topic that has been investigated again and again over a long period of time. The present study has been unable to prove any extensive links between preparation for retirement and adaptation to the post-professional phase. However, this result should not lead to the conclusion that preparation is something to be neglected. On the contrary, we should offer and advertize various kinds of preparatory courses. In doing so, account must be taken of the fact that older people find themselves in varying circumstances and that different professional and social groups have their own needs. Furthermore, it is important to remember that people who have been less active socially are harder to reach. Yet this group is later the one, through not thinking enough about the situation, which is faced with avoidable problems. For this reason, courses should be offered that are not too ambitious and cover a wide variety of topics.

Successfully overcoming retirement as well as approaching old age can be learnt. It appears to be less to do with intensive preparation shortly before the event, and more to do with living in a way that is likely to further skills throughout ones whole life. Besides adequate material conditions, above all, it is social structures which ensure personality development is a lasting process.

The conviction that we can effectively influence our own life and fate¹⁵, a positive personal image of old age, as well as the feeling of having reached our own professional goals, all promote this competence and thus the chance of coping with new, possibly difficult situations. Among the factors furthering the development of personality are also working conditions which neither harm us nor place a burden on our health. At the end of the 20th century, an enormous amount is expected from employees; working hours are long and the pressure to perform is high. Therefore factors such as codetermination, room for manoeuvre and health-promoting conditions in the working place are very important, such factors also have a positive effect on post-professional life.

However, modern life is also – to a very great extent - a leisure culture. Free time is important already before retirement and should be cultivated, all the more as the results show that leisure activities are moulded by continuity in the transitional phase to retirement. An active and contented generation of pensioners will only emerge if those concerned already learn to organize their free time meaningfully and satisfactorily in earlier years. On the other hand, we must not overlook the fact that a large proportion of older people are strongly orientated towards work. They are used to putting a large part of their life and commitment into their work, thereby obtaining their status and satisfaction. This circumstance must be taken into account through a more flexible organization of retirement age. In this way, the varying individual requirements can be met: people who feel burnt out, for example, can benefit from

¹⁵ In contrast to a more fatalistic attitude towards life

longer holidays or early retirement. Those who strongly identify with their work, on the other hand, should be able to stay active beyond the normal age for retirement.

4. Foreigners in the transition to retirement age

The foreign resident population is not only over-represented in the economically weaker group, but their quality of life and social integration also lie clearly below the level of the native population. The high level of poverty in the foreign population is insofar socio-politically relevant as increasingly more "guest workers" who immigrated to Switzerland in the 1960's and 1970's are now reaching retirement age. Even if some of the retired foreigners return to their native countries the number and proportion of foreign AHV pensioners will clearly rise in the next few years. Due to their income situation, some of these foreign pensioners will be dependent on supplementary benefits in addition to their AHV pensions. It is therefore very important that this group should be well informed about their legal rights. A project carried out by Rosita Fibbi (University of Lausanne) and Claudio Bolzmann (University of Geneva), has specifically investigated the situation of foreigners in the transition to retirement age, involving Italians and Spaniards aged between 55-64 living in Geneva and Basel. The great majority of these foreigners immigrated to Switzerland in the mid-1960's, thus comprising a population group of foreigners that has been in Switzerland for a long time.¹⁶

The NRP 32 study shows that the decision to return to their native country or to stay in Switzerland after retirement is a difficult one for many Italians and Spaniards. Opinion with regard to their future plans can be divided three ways: 35% of those interviewed want to stay in Switzerland and 27% want to go home. In view of the dilemma represented by this decision, the remaining 39% choose to commute between their native country and current place of residence (a strategy which has become realistic for many Italians and Spaniards because of improved and reasonably-priced transport possibilities). The men tend more towards a return, whereas the women, due to family links, tend to stay. This can lead to lengthy discussions on the part of older couples. The final decision to stay in Switzerland, to commute or to return depends on family, health and financial conditions. Thus, those wishing to return were more frequently people without children living nearby. The decision to return or commute, moreover, requires good health as well as a high level of financial security. Less affluent immigrants often have to stay in Switzerland because they would otherwise lose their right to supplementary benefits. Two-thirds of those deciding neither to return nor commute could be graded as financially weak. The decision of older foreigners to stay in Switzerland is not always freely made, but linked with socio-legal regulations.

As in the case of the Swiss, foreign employees who define their professional life as successful most frequently register a positive image of retirement. In the group of the successful, 70% represent a positive image against only 42% of the interviewees who define their professional lives as unsuccessful. This reflects the fact, also observed in the study "Transitions to

¹⁶ Cf. Claudio Bolzmann, Rosita Fibbi (1993) *Les immigrés face à la retraite: rester ou retourner?*, *Revue suisse d'Economie politique et de Statistique*, 129,3: 371-38; Claudio Bolzmann, Rosita Fibbi, Marie Vial (1996) *La population âgée immigrée face à la retraite: Problème social et problématique de recherche*, in: H.R. Wicker, J.L. Alber et al. (eds.) *L'altérité dans la société: migration, ethnicité, état*, Zurich: Seismo: 123-142.

retirement', that professional failures have a negative effect on the post-professional phase. Professional failures and high physical working loads were quite frequent, especially in this generation of foreign workers. At the same time, the risk of foreign workers aged 55-64 becoming unemployed is higher than in Swiss of the same age. Breaking off employment prematurely is also comparatively frequent in foreign workers, whereby foreigners forced to take early retirement are most frequently dissatisfied with their situation.

In the first phase of immigration, the selection procedure of labour force emigration led to a selection of foreigners with good health; either because primarily healthy people emigrated or because only physically fit workers were granted immigration permits. Today, it is becoming clear that the health situation of these foreign workers before and after retirement has markedly deteriorated: older foreign women and men show poorer rates for all health indicators than do Swiss of the same age. Thus, physical disabilities appear in the foreigners before AHV age significantly more often than in the Swiss. Twenty eight percent of foreigners aged 55-64 were receiving a disability allowance (compared to 12% of the total population of the same age). Back pain is listed by approximately 44% of the foreigners interviewed, also leg pains are frequent, especially in women (long periods of standing in their jobs). Moreover, foreign women often suffer from headaches. A prime reason for the worse health of older foreigners is their high workload, going back over decades. They often had to take over those jobs the Swiss no longer wanted to do. The social relegation to a lower class experienced by guest workers in the 1960's is producing negative health consequences in the 1990's.

The main recommendation is for more attention to be paid to the social and health-related problems of this numerically growing group of the resident population. This means, on the one hand, they should be comprehensively informed at an early date about their legal and social insurance situation in the event of a return to their native country. Another issue is the organization of special preparatory courses on retirement for foreign people. Indeed, the pilot courses of Pro Senectute: rimanere – rientrare – pendolare? found a good echo.

5. Main results and perspectives

In view of the emerging demographic ageing of the employed population, a policy of early retirement is proving to be more and more of a blind alley (as has also been determined by the OECD). Not only is this an additional burden on the funding of old age provision, but the valuable skills of older employees are also lost. All the motions aimed at making retirement age more flexible should therefore also contain the possibility of 'upwards flexibility' (e.g. the right to continue working after reaching the official retirement age, partial pension schemes, which facilitate part-time employment after reaching AHV age). Too few companies and enterprises have so far recognized that the future economy can less and less afford to treat older employees disadvantageously. In view of the expected demographic development in the labour market, the continued education and training of the over 40s must be more strongly promoted in future.

Furthermore, longitudinal comparisons clearly show that images of 'retirement shock' definitely belong to the sphere of popular myth. As a rule, personal well-being hardly changes after retirement. The activity profile after retirement also supports this thesis of a strong

continuity. Immediately after retirement, there are frequently fewer changes than is generally supposed.

Overcoming retirement and approaching old age can, however, be learnt. Preparatory courses on retirement arranged at short notice are not enough. On the contrary, the longitudinal study indicates that general skills and resources which facilitate our management of difficulties and demands during our whole lives also promote well-being in retirement. Instead of (or possibly more cautiously: alongside) the forms of preparations for retirement already known, there must be a general promotion of skills.

Older foreign men and women constitute a special high-risk group in the transition to retirement age. This group suffers more than averagely from poorer economic and health conditions. They are also particularly strongly affected by forced early retirement. These people are frequently ill-informed about their rights and socio-legal problems occur when foreign employees return to their native country without having been adequately informed. We also recommend the organization of special preparatory courses on retirement for foreigners. Corresponding pilot courses held by Pro Senectute have shown good results.

C) Economic and social situation of older people

1 The new demographic challenges facing provision for old age

On the whole, thanks to the incorporation of the three pillar-principle (1st pillar: AHV, 2nd pillar: professional provision, 3rd pillar: private savings), Switzerland has developed a well-functioning system of old age provision that ensures the economic existence of older people. Poverty in old age had been effectively eliminated. Thus, old age provision in Switzerland today may be seen as a socio-political success. Internationally, Switzerland's old age provision is generally considered to be exemplary, thanks to its distribution between the contribution procedure and the formation of coverage capital. In contrast to frequently expressed assumptions, the further development of the AHV has not burdened relations between the generations but has eased these. Thus, economic security in old age makes it easier for the older generation to open up to the social and cultural innovations of the younger generations.

A decisive question is whether old age provision will remain feasible with the approach of demographic ageing. Pension systems that are based on a contribution procedure financed by salary contributions are particularly strongly affected by demographic shifts. In such a system, demographic ageing has a negative effect on the financial balance of pension funds, as the number of old age pensioners rises faster than the number of employed people who are liable to contribution.

Due to future developments, Switzerland and the other European countries all see themselves confronted with the question of reforming the present pension systems. For the reorganization of a contribution procedure that is in deficit there are basically three possibilities:

1. to increase salary contributions, which, in view of higher ancillary wage costs, meets with more and more political resistance. Wider support of funding is also conceivable, using additional general tax money. Partial funding of the AHV by means of indirect taxes (value

added tax) is in fact foreseen in Switzerland. In this way, pensioners contribute to the funding of old age provision.

2. to reduce pension payments, directly or indirectly through waiving full adjustment to wage levels or inflation. However, this strategy risks the danger of poverty in old age becoming a frequent problem again.
3. to raise the retirement age (as some European countries have foreseen at least for the future). At present, such a strategy meets with resistance in the labour markets, and the trend of the last few years is running virtually in the opposite direction with an increasing number of early retirements. In the long term, however, a rise in retirement age is to be expected.

The system of occupational provision, which functions according to the formation of coverage capital, may be less directly affected by demographic ageing, but economic problems can also arise here with rapidly rising demographic ageing. For example, saved capital can only be paid out in times of sufficient production capacity. Under unfavourable circumstances, the payment of pension claims may lead to the devaluation of accumulated capital. For example, problems may arise when pension money that has been invested in real estate loses value due to shrinking population levels combined with a lower demand for living space. At the same time, the guarantee that occupational provision will be paid out is closely linked to the quality of investment policy and the efficiency of the supervisory organs, as a misguided investment policy on the part of the pension funds can have a long-term negative effect. The development of new international capital markets and financial instruments constantly enforces new adjustments to investment policy and investment control.

Within the scope of the NRP 32 and on the basis of these challenges, Dr Werner Nussbaum, a legal expert on occupational provision, carried out a comparative study of performance guarantees, investment and control efficiency in occupational provision. This study showed a whole series of possible reforms for the improvement of investments, controls and performance guarantees in occupational provision.¹⁷

2 On the economic situation of pensioners

Due to the further development of old age provision and general rise in prosperity, the risk of poverty in pensioners has clearly fallen in recent decades. The results of the National Study on Poverty¹⁸ also show that old age pensioners no longer register an above-average risk of

¹⁷ Cf. Werner Nussbaum (1996) *Das amerikanische System der beruflichen Vorsorge im Vergleich mit dem schweizerischen System*, *Soziale Sicherheit* 3/96: 112-129, as well as Werner Nussbaum (1999) *Das System der beruflichen Vorsorge in den USA im Vergleich zum schweizerischen Recht*, Berne: Haupt. Subsequent to this study, Dr Werner Nussbaum and others founded the association *Innovation Zweite Säule* in Berne in April 1996. This Think Tank is to contribute towards the adjustment of occupational provision in Switzerland to the increased demands of modern capital markets. Among the tasks of this association are the analyses of new instruments and the possibilities of international investments as well as the use of modern technology for the implementation of occupational provision.

¹⁸ The corresponding analyses on the economic situation of older people were effected in close co-operation between the NRP 29 (Changes in Life Forms and Social Security) and the NRP

poverty. This applies in particular to the 'young pensioners', who, due to the further development of old age provision (with its three pillars), are financially secure. This financial security will probably continue, as the next generations can increasingly rely on pension payments from occupational provision. However, there are still regional differences in the economic situation of older people, with the pensioners in the Ticino characterized by below-average income. At the same time, there are enormous social differences both with regard to income and assets.

Main results in the form of theses¹⁹

1. The risk of poverty for today's pensioners is only low because the AHV has been further developed in recent decades and because, with the system of supplementary benefits (EL), there is now a form of securing a basis of subsistence for AHV pensioners that is tailored to their needs. A significant proportion of AHV pensioners (approximately one-quarter) is not actually poor, but can be described as economically weak (and without large income reserves). Socio-political decisions and measures will have an impact on the development of any future old age poverty. A reduction in social benefits can rapidly lead to renewed poverty for many older people.
2. According to the National Study on Poverty, up to one-third of all those entitled to claim do not take up supplementary benefits, partly because of being ill-informed and partly from not wanting to be 'dependent'. The proportion of supplementary benefit recipients in young pensioners will probably fall in the long term, or remain more or less stable. In contrast, we can expect a rising proportion of the very elderly claiming EL (as EL are more frequently used to cover nursing home costs). The proportion of women dependent on EL will probably be higher than in men of the same age. In young pensioners there are signs of a gradual decrease in the risk of poverty for both sexes.
3. Switzerland – like other countries – is characterized by an unequal distribution of income and assets. The income and assets of the older population are also unequal, and in future generations of pensioners the social disparities will continue to intensify. The question of a redistribution within the older population will then acquire increased brisance. In future, it will be a question not only of solidarity between younger and older people but increasingly also of solidarity between wealthy and less wealthy pensioners.
4. On the whole, a further improvement in the economic and social situation of the majority of pensioners in the coming ten years can be expected (also because well-qualified, active and healthy people are reaching retirement age). However, economic inequality in pensioners conjures up the risk of a 'two-class situation', and could have a relatively

32 (Ageing), cf. Robert E. Leu, Stefan Burri, Tom Priester (1997) *Lebensqualität und Armut in der Schweiz*, Berne: Haupt.

¹⁹ Cf. François Höpflinger (1997) *Zur Entwicklung der Armut und des Armutsrisikos bei zukünftigen Rentnerinnen und Rentnern*, Fachpublikation 1/97, Zurich: Pro Senectute (French: *Le développement de la pauvreté et du risque de pauvreté chez les futurs retraités*).

negative influence on the social and economic situation of pensioners.

People excluded from social networks or from working life at an early age form a particularly high risk group in old age. The economic crisis of the 1990's has not yet had a massive effect on the economic situation of pensioners. In the future, however, there are likely to be more older people reaching pensionable age due to forced early retirement or long-term unemployment without any financial reserves and with feelings of resignation. In the case of the very old, moreover, we can expect a growing group of women and men who, due to illnesses and the need for long-term care, are gradually growing poorer (because their savings have been exhausted).

5. A central problem group with an above-average risk of poverty shortly before or after retirement is that of foreign women and men (who also have worse health on average). As, in the next few years, more foreign workers will be reaching pensionable age, the number of foreigners with low incomes or reliant on EL is also like to rise.

As a general conclusion looking at the various trends and developments, the recommendation for counselling and guidance in old age should be more purposeful and need-orientated, simultaneously tackling economic, social and psychological problems.

4. Social relationships of older people

Good contacts and a high level of social support are central elements of the quality of life of older and elderly people. Good social relationships have a positive effect on well-being and health. Information on the contacts of older people living at home with relations, friends and neighbours was collected in a study as part of the NRP 32 project 'Autonomy in old age and socio-cultural environment' carried out by the 'Centre Interfacultaire de Gérontologie' (CIG). The study was designed to allow both a comparison between various regions (Geneva as an urban centre, Central Valais as a rural-industrial region) and a comparison between the years 1979 and 1994.²⁰ The main results may be summarized as follows:

Family circumstances: The proportion of older people living at home without family members is low, also in the case of people aged over 80. Most older people have children and grandchildren as well as at least one surviving sibling. Due to the increasing length of life generations experience together, the proportion of older people with relatives from other generations (children, grandchildren) has risen in a comparison over time. The great majority of pensioners can count on at least one surviving child. In most cases, the older people of today can fall back on a diversified family network. In contrast to views sometimes expressed, the proportion of elderly people without relations has not risen at all. The opposite is rather the

²⁰ Cf. Christian Lalive d'Epinaay (sous la dir. de) (1998) *Vieillesse au fil du temps (1979-1994)*. Santé, situations de vie et formes de participation des personnes âgées en Suisse, Geneva: Centre Interfacultaire de Gérontologie (final report, preliminary version). For an account of the study cf. also Christine Bétemps, Jean-François Bickel, Matthias Brunner, Cornelia Hummel (1997) *Journal d'un enquête: La récolte des données d'une recherche transversale par échantillon aléatoire stratifié*, Lausanne: Réalités Sociales

case, and the proportion of older people with complete families (partner, at least one child, a grandchild and a sibling) has risen.

Contacts with relations: The most frequent contacts arise, as can be expected, with the older people's own children. A good two-thirds of the people interviewed in Geneva and a good three-quarters of the Valaisans aged between 60 to 79 with children met one or more of their children once a week, or more often, in 1994. Data from the Swiss Public Health Survey of 1992/3 also show that over 70% of the elderly with children see their children at least once a week.²¹ Contacts with grandchildren, if there are any, are also frequent and intensive. In contrast, contacts with siblings, brothers- and sisters-in-law, nephews, nieces and cousins, are significantly rarer, especially in urban regions. Comparing 1979 with 1994, family contacts – in contrast to what is often claimed – have become stronger. The thesis of crumbling family relationships is not supported, quite the reverse. Thus, joint holidays spent by grandparents and grandchildren are more frequent today than in earlier times. This is linked with the better health of older people, which has made active grandparenting possible.

Friendships: Older people's networks of friends have clearly extended between 1979 and 1994: the proportion of pensioners with two or three close friends has risen in both regions (Geneva, Central Valais), whereas the proportion of older people without close friends has fallen. Whereas in Central Valais, in 1979, 38% of those aged 65 and above did not name any close friends, only 23% did not do so in 1994. In contrast, the proportion of those with two or three close friends increased from 50% to 64%. There was an analogous evolution in Geneva, where the proportion of older people without close friends fell from 37% to 19% between 1979 and 1994. There, the proportion of interviewees with two or more friendly relationships increased from 51% to 71%. These data also point to an improvement in the social relationships of today's pensioners.

Neighbourhood: Neighbourhood relationships in older people are not particularly pronounced. According to the National Study on Poverty of 1992/3, approximately 40% of AHV pensioners have no mutual visits from neighbours. Many of the pensioners in Valais and Geneva either do not cultivate any, or at the most, have a neutral relationship with their neighbours. In the pan-Swiss Univox Survey of 1998, 27% of Swiss people aged between 65-84 said they hardly cultivated close relationships with their neighbours. They would greet one another and have a short chat from time to time, but otherwise few relationships developed. In only a third of cases did neighbours help one another out with small services. Close neighbourhood contacts are also the exception in older people, and in the comparison between 1979 and 1994, the contacts to neighbours had become even looser, above all in urban regions. This is also linked with the fact that many AHV pensioners are mobile today and less reliant on the immediate neighbourhood (which cannot be chosen).

Overview: Summarising family and friendly contacts, the following picture emerges: firstly, only a small minority of AHV pensioners living at home has weak or no social relationships. Social isolation is also the exception in the case of older people. The number of socially isolated people does increase with rising age. It is often not age alone but social deficiencies

²¹ Cf. Theodor Abelin, Valerie Beer, Felix Gurtner, (eds.) (1998) *Gesundheit der Betagten in der Schweiz*, Results of the Swiss Health Survey of 1992/93, Berne: Haupt, p. 128.

that existed beforehand, or the death of a partner or friends, that contribute to the social isolation of the very old. As women more frequently suffer bereavement than men, the risk of social isolation is greater in women than in men.

Secondly, it is not shown that social isolation has increased in the past fifteen years (as people with a pessimistic view of culture claim). The proportion of socially isolated pensioners fell from 13% to 6% in the Valais and in Geneva it remained stable at 13%. Roughly analogous values were recorded in a study carried out in the City of Zurich in 1997, where the proportion of very isolated older people – i.e. people without relatives, friends or good neighbourhood relationships – amounted to 10% of the over 70-year-old inhabitants of Zurich.²² Loneliness in old age does exist, but it is not on the increase and it only affects a minority in the case of the very elderly. It is therefore important to forget the equation 'old=lone' and concentrate on the minority of lonely older people.²³

Housing conditions of the elderly

Housing conditions belong to the most important areas of life of older people. They have a central effect on social integration. Problems such as increasing loneliness invoked by the death of a partner or friends of the same age, or failing strength that makes many everyday tasks tiresome, can be relieved or exacerbated by the older person's housing situation. Accessible housing can dramatically improve quality of life. There is a close link between autonomy in old age and the quality of housing.

Today, every fourth household in Switzerland already includes at least one person of pensionable age.²⁴ In future, pensioners will form one of the most important demand groups on the housing market. At the same time, the housing requirements and wishes of the older population change rapidly as each generation is characterized by its specific biography.

Housing in old age: principles and recommendations²⁵

1. A form of housing that is individually orientated to personal requirements and wishes makes life easier – also for older people.
2. If the possibility of choice is defined as an aspect of the quality of life, a central aim of a policy on ageing must be to create the variety of housing forms suited to the manifold requirements of old and very old people, from which they can choose the right solution based on their specific needs.

²² Cf. Brigitte Wehrli-Schindler (1997) Sozialberatung für über 70-jährige Personen in der Stadt Zürich – Bedürfnisse, Angebote und ihre Nutzung, Zurich: Sozialdepartement der Stadt Zürich.

²³ A qualitative study was specifically conducted on the subjective experience of loneliness in the Ticino, cf. Thea Moretti-Varile (ed.) (1996) Solitudine no... ma tristezza. Vissuti ed esperienze raccontate da un gruppo di vedove, Giubiasco: Associazione ticinese terza età.

²⁴ On the housing situation of older people in Switzerland, cf. Michael Arend (1996) Wohnversorgung und Wohnsituation älterer Menschen in der Schweiz, fact file, Zurich: Synergo (mimeo).

²⁵ Cf. Brigitte Wehrli-Schindler (1997) Wohnen im Alter. Zwischen Zuhause und Heim, Zurich: Seismo.

3. If intergenerational co-existence on a housing estate is to function, varying requirements need to be taken into account when building (noise protection, arrangement of the living space). As a rule, in order to promote intergenerational contacts, the residents should be guided by the builders (co-operative, landlord), by community workers or largely by self-help organizations.
4. Important conditions for well-functioning old people's accommodation are a central situation, favourable rents, a high level of comfort (modern housing, practical kitchens and bathrooms) as well as good care.
5. New housing forms are gaining increased significance. The need for sheltered housing or sheltered communities is increasing, especially in the case of the very old. Experience so far of sheltered housing and sheltered villages shows that the remaining autonomy of the residents can be furthered in this way.²⁶
6. It is not just a question of helping old people to stay in their own homes as long as possible. The wish to stay in one's own home, requires accompanying measures (e.g. the further development of community care as well as the intensification of social networks, in which single elderly people also feel integrated).
7. Measures have to be found that enable the advantages of autonomous living to remain predominant as long as possible. In this respect, there is also the possibility of planning residential areas so that they are better suited to the requirements of older people. On the one hand, the aim is to promote a sense of community among residents and, on the other hand, to safeguard their autonomy. Possibilities for intervening exist at various levels:

a) at the political level of the local authorities, e.g. to improve dangerous road crossings, speed reductions, to improve the infra-structure of residential areas (local centres, community patient services, Spitex centres), to increase co-determination on the part of the older population. Residential areas need to be examined from the point of view of old people's needs. Analogous to environmental and social compatibility, housing estate structures should be checked for their compatibility for older people and in particular for the elderly disabled.²⁷

b) at the level of private owners, e.g. to 'gently' renovate housing, to promote mutual help, to convert a certain part of large housing estates into old people's accommodation, to establish community centres, to adapt housing for older people, etc. In 1994, the Pro Senectute of the Canton of Zurich launched a project for counselling and pilot projects on the topic of "Adapting Housing", aimed at informing older people about the possibilities. The Swiss Centre of Accessible Building for Disabled People in Zurich has elaborated a series of concrete models for adapting housing for young and old people with disabilities.

c) at the level of residents, e.g. to initiate and cultivate social contacts, to be active in neighbourhood help, to rent out no longer used living space, to make structural alterations to flats or houses.

d) at the level of architecture and household technology: buildings can be made 'disability friendly' by appropriate architectural measures. At the same time, there are signs of new

²⁶ Cf. Daniel Gredig (ed.) (1995) *Dezentrale Pflegestationen. A model of care for the elderly becomes 10 years old. Publication commemorating the 10th anniversary of the Mme Dessales Foundation, Biel, Biel: Stiftung Mme Dessales*

²⁷ Cf. R. Welter; R. Simmen; K. Helwing (1994) *Innovative Altersplanung im städtischen Umfeld, NRP 25 Project Report No. 68, Zurich.*

technological innovations which allow the disabled to manage their households independently (automatic window- and door-opening, infra-red controlled light switches etc.)

6. Elderly people in residential and nursing homes

At present, less than 4% of all people aged 65-79 in Switzerland live in residential and nursing homes. Even in the case of those aged 80 and older, less than a quarter lives in a home or a hospital. Not until very old age does such a stay become more frequent and, in 1993, 38% of the over 85 year olds lived in residential and nursing homes. Moving to a home is not determined by state of health alone but also by social factors. The most important aspects are marital status, income and the presence of children and grandchildren: unmarried elderly people end up in residential and nursing homes more frequently than married ones. Rich elderly people live longer in private households than poor ones and elderly people with children are more frequently cared for at home.

Regional factors are also important, and in Switzerland the proportion of elderly people in residential and nursing homes varies from one canton to another. It is interesting to note that there is no clear link with demographic ageing. It is not the cantons with the highest proportion of very old people that have increased their number of residential and nursing home places, instead it is linked to socio-political conditions (the tradition of homes for sick and old Burghers, the fact that Spitex or community services have not been established everywhere). Thus, the proportion of elderly people in residential and nursing homes is comparatively high in rural and Catholic regions of German-speaking Switzerland. In contrast, the western cantons of Switzerland, which have a long tradition of community care, place relatively few elderly persons in institutional homes.

Old-fashioned views as well as prejudices against institutional housing forms lead to the continuing bad reputation of residential and nursing homes. Although, it is undeniable that many residential and nursing homes have greatly modernized and professionalized their services in recent years, making the gap between reality and popular perceptions even wider. In order to record the rich reality of today's residential and nursing homes, a comparative study was carried out within the framework of the NRP 32.²⁸ This study investigated residential and nursing homes with at least 12 residents from four cantons (Berne, Geneva, Vaud and Valais).

Composition of the residents

The average age of residents in the institutions investigated was 83 in 1994, half of the residents (75% women) being 84 years or older. Only 5% of the residents were not of pensionable age (primarily those in psychiatric and psycho-geriatric institutions). The average age of people living in residential and nursing homes has risen again since 1994 and is likely to rise further in the future. The functional autonomy of residents is frequently restricted. Thus, in 1994, only 32% of the residents in the homes investigated were able to leave the homes for walks or shopping expeditions without help. A further 32% could move around the home

²⁸ Etienne Christe, Antoinette Genton Trachsel, Elisabeth Hirsch Durrett, Pierre Mermoud (1997) Relations sociales et institutions, research report, 20th August 1997, Geneva (mimeo).

without help, 31%, however, were dependent on help and 5% were completely bedridden. Moreover, 48% showed significant problems communicating with or relating to others due to psychological or physical disabilities, and 25% showed clear signs of anxiety or depressive conditions. It is mostly the very old population which needs special nursing and care and which often finds enormous difficulty in preserving social contacts and activities. Furthermore, 65% of residents were drawing supplementary benefits in 1994.

Moving to a home

Because the move from private accommodation to a residential or nursing home is perceived and experienced as an enormous change in an elderly person's life, measures aimed at facilitating the transition to a new living situation are particularly important. These measures include the free choice of a home, an individually made decision as well as adequate prior information. Preliminary visits or a short trial stay are often specifically offered. In over 90% of all homes investigated it was already considered standard practice in 1994 to speak to future residents or to exchange information. Preliminary discussions with relatives are also frequent today, as are entry rituals. For example, a newcomer is introduced to the other residents in 78% of all homes.

The move to an old people's home requires the elderly person to give up a large part of his/her accustomed furniture and personal belongings. An exploratory study on the psychological background of moving into a home²⁹ showed that the decision regarding which pieces of furniture and objects were taken or left behind depended less on the usefulness of the things and more on their emotional and biographical significance. Each elderly person attempts, in his or her individual way, to reconstruct whole ensembles of familiar things at the new home.

Getting used to the new living situation depends on a number of factors (the voluntary nature of admission as opposed to force, the prior living situation, physical and psychological health, social skills, etc.). The change to a new daily routine, to a new environment, to new people, etc., is often difficult and may at the beginning lead to misunderstandings, aggressiveness or resignation. For this reason, a regular carer is particularly important at the beginning and in fact it is customary to assign newcomers to a special carer in most homes. Much is done in the homes to encourage visits on the part of relatives or friends. Thus, 84% of the homes stated that visits were possible at all times. Many residential and nursing homes are also more open and flexible from a social point of view than propagated by popular clichés of institutional life.

Social relationships among home residents

Relatives and friends are the central contact people for home residents with former neighbours withdrawing. Most homes make an effort to integrate relatives, if there are any. Thus, 82% of the homes interviewed in 1994 offered relatives the possibility to take part in the home's activities. In 83% of the homes, relatives or friends were allowed to participate in mealtimes, and 41% of the homes were willing to integrate relatives or friends in the care of the elderly person. In contrast, it was and is comparatively rare to let relatives and friends take part in staff training or team meetings. For reasons of space, it was and is also relatively rare for

²⁹ Project 'The meaning of home for the elderly and the importance of the security of one's home' (Prof. A Lang).

relatives and friends to spend the night in the home itself (only 18% of homes offered this possibility in 1994).

In each case, increased efforts were being made to overcome the cliché of 'shutting away' people in homes. However, the participation and integration of relatives depends on the quality of previous relationships. Former family conflicts are not dissolved through admission to a home, but sometimes increased due to feelings of guilt. Often spouses, siblings or friends of elderly residents are also very old, which restricts their active participation in care and nursing.

Whereas the contacts with relatives or close friends mostly continue after admission to a home and are actively encouraged by many homes, contacts with the resident's former circle of friends or clubs clearly diminish. This is often due, on the one hand, to the bad state of health of elderly residents. On the other hand, many associations and clubs are concentrated on active senior citizens, often excluding home residents from the outset.

One of the main characteristics of life in a residential or nursing home is the communal aspect of living together; a communal character which is different from running one's own home. Privacy is reduced, and new forms of co-existence arise. New contacts, but also new conflicts arise at two levels:

Contacts between residents and staff: here the size of the home seems to be a decisive variable, as larger homes (with more staff) often take on the formal organization of a hospital. The hierarchical and formal regulations of an efficient organization and staff management affect relations with the residents. It is above all the daily routine, the pressure of work as well as the lack of time due to tightly calculated staff percentages that restrict the quality of social relationships in homes. Reducing staffing levels is often effected at the expense of human relations.

Contacts between residents: the fact that the home management and carers are not always informed about the mutual contacts between the residents makes it difficult to obtain clear findings on such contacts. Conflicts between residents are quickly visible, whereas new friendships often arise and function inconspicuously. In spite of all restrictions, however, new friendships in homes do not appear to be rare, above all among women.

On the whole, there is a variety of forms of social contact within residential and nursing homes, refuting views of residential and nursing homes as a uniform living space.

Activities in residential and nursing homes

The activities offered play a central role in the organization and planning of home life. It must be taken into account that residential and nursing homes are mostly comprised of people whose activities are submitted to massive restrictions due to poor health. In particular, psychological problems (dementia, depression) lead to significant restrictions on the participation of residents in social activities. For this reason, specific activities, and exercise is vital in these homes. Sixty six percent of the homes surveyed indicated that one or two members of staff were responsible for activities and exercise. Opportunities for activity vary from home to home, the size of the home and the existence of a special trainer being important

influential variables. There are frequently gymnastics, handicrafts, party games, film and video sessions as well as local excursions. In second place there are active cultural pastimes, such as group discussions, singing and music groups, play-acting and dancing. It is shown that some classic activities (knitting and handicrafts) are losing interest, and in contrast others – such as memory training, music therapies as well as excursions – are becoming more popular.

A more detailed analysis of activity patterns shows that the majority of all activities take place in the home and are organized by home staff. This trend reflects new ideas on the theory of activity emanating from socio-gerontology. The most popular activities outside the home are local excursions (museum visits, short walks followed by a cup of coffee etc.). On the whole – not unexpectedly – it is clear that the lower the functional autonomy on the part of residents, the more activities are organized by the homes themselves.

The active participation of residents in everyday domestic chores not only has an activating and integrating effect but can improve a home's efficiency. The practice in the various homes also differs in this respect, with more value being attached to the active participation of elderly residents today. Firstly, it is a question of mutual help among the residents, although this happens frequently in only about one-third of all homes. In second place come household chores, such as laying the table, making beds, helping in the kitchen etc. The participation of residents in administrative and nursing duties is rarer. It is clear that the extent of such daily chores depends on the mobility and psychological health of the residents. At the same time, the residents are generally expected to do more when there is a lack of staff. Only in a few homes is there, however, - in spite of a fundamentally positive attitude towards the increased participation of residents - a clear and well-devised policy for residents' help in daily tasks.

Codetermination

During the last few decades, the question of home residents' rights has become more significant. In Quebec, for example, the participation of residents is legally stipulated, and in 1993 the European Union approved a charter on the rights and freedoms of older people, in which the participation of residents was mentioned. There is at present no legal basis in Switzerland regarding the right of residents to have a say in the running of their homes. In various homes and institutions for the elderly, however, the codetermination of the residents has been extended in recent years, e.g. in the form that the residents are consulted on important decisions. In contrast, direct representation of the residents in the management of the home or in the managing committee is rare (and it was only incorporated in 2% of the homes surveyed in 1994). Residents' pressure groups are also rare (1994: 4% of the homes). There are more often regular meetings, in which residents can put forward their wishes. Such meetings were carried out in 23% of all homes in 1994. 30% of the homes also experienced an indirect representation of the residents insofar as relatives were granted a certain degree of codetermination. In 1994, however, there was still no special structure for the representation or codetermination of residents in 62% of all home surveyed. Two factors were listed by the home management explaining the lack of representation or codetermination on the part of the residents: the lack of an organised group and the low interest of most residents, on the one hand, and the enormous heterogeneity and individual nature of residents' needs (which made the classic principle of pressure groups pointless). It is a fact that individualization – in the sense of a free choice of the menu or activities, etc. – is the strategy of co-determination clearly prevailing in homes today. Nevertheless, the example of certain homes shows that,

especially in the larger homes, various forms of the right to be heard and codetermination (such as working groups, regular tables, home councils, etc.) can be meaningful even in the case of elderly people with disabilities. We can expect that future generations of pensioners will increasingly insist on the right to be heard and to decide.

Main results and perspectives

Old age provision in Switzerland – with its principle of three pillars – has proved itself to be successful. It has contributed considerably to a reduction in poverty in older people. There is no doubt that it will also be wise to retain a balance between the contribution procedure and the formation of coverage capital in future. In occupational provision, performance guarantees, investments and controls are to be more finely tuned to new globalised financial markets and financial instruments.

The risk of poverty in pensioners has clearly fallen. We can also expect a further improvement in the economic situation of many pensioners in future. At the same time, however, there are clear inequalities in the economic resources of older people. In future, it will thus not only be a question of solidarity between younger and older people but also of solidarity between wealthy and less wealthy pensioners. In future, supplementary benefits will also be an inevitable element safeguarding the existence of older and very old people with low incomes.

In Switzerland, the quality of housing of most older and elderly people is high. The manifold requirements of older and very old people mean that many different forms of housing are necessary. The wish to stay in one's own home, particularly in the case of very old people, however, requires accompanying measures (e.g. the further development of community care, forms of housing suitable for people with disabilities, etc.) The need for sheltered housing or communities is increasing, particularly in the case of the very old. But all measures enabling and facilitating contacts across the generations also need to be promoted.

Contrary to widely-held pessimistic perceptions, the social relationships of older people have improved rather than deteriorated. This applies in particular to contacts with relatives and friends. Only a small minority of older people has no, or poor, social relationships. Social isolation or loneliness in old age is not the norm. Nevertheless, it is important to target the minority of lonely old people (maybe by intensifying contacts with friends and neighbours or by community care services reacting sensitively to problem situations).

Even in the case of 80 year olds and older people, less than a quarter live in a home or nursing institution. The average age of those living in residential or nursing homes has clearly risen in recent decades and is likely to rise further. As a result, the proportion of disabled residents, or those with limited autonomy, is high in most institutions. Detailed analysis shows that residential and nursing homes today are very different from how they have been perceived. Most residential and nursing homes have opened up to the outside world and an increasing number of them support and promote the individuality of their residents. Thus, perceptions of residential and nursing homes as 'collective housing' have been put into perspective. The main problem lies less in the lack of quality in most institutions but in continuing negative and false perceptions of the 'old people's home'.

D) Personality, well-being and resources

1 Well-being in old age

Two facts are clearly shown, both in the National Study on Poverty carried out in 1992 and in the Swiss Health Survey of 1992/93³⁰: Firstly, most people in Switzerland are characterized by a high level of general well-being, a fact which also applies to the older population. The transition to the post-professional phase of life does not lead to a general reduction in contentment and well-being. Secondly, symptoms arousing worry in the older population are relatively frequent. Particularly widespread are exhaustion, sleeping disorders, headaches, worries about health and anxiety.

A detailed and theoretically guided investigation of the central factors influencing well-being in old age was carried out within the framework of an interdisciplinary project on ageing (IDA project). The IDA project was the continuation of a long-term medical study, entitled the 'Basel Study', and the supplementation of the latter by psychological aspects for 1993 and 1995. Former workers and employees of large chemical enterprises from the Basel region aged between 65 and 94 were investigated after having been already interviewed in 1960, 1965 and 1971. A summary of Pasqualina Perrig-Chiello's analysis of factors influencing well-being in old age shows the following:³¹

Satisfaction with social contacts

Here there were two main observations:

Belief in one's own abilities and possibilities of exerting influence: Satisfactory social contacts in old age were positively linked with the ability to develop personal initiative, at the same time remaining open to the help of other people. In the younger age group (65 –74), the subjective assessment of memory was positively associated with contact satisfaction. A positive assessment of one's own intellectual abilities seems to be a prerequisite for social participation after retirement, or for wanting social participation.

The quality not quantity of contacts is decisive: Neither the frequency of social contacts nor the circumstances of the person/s with whom one shares accommodation (whether with relatives or friends) proves decisive for the contact satisfaction of older women and men. In contrast, the assessment of the importance of social contacts is positively linked to a high contact satisfaction. Clearly, the closeness and the intimacy of the social network are less significant than the emotional attitude towards social contacts (openness, esteem).

Psychological well-being

The analysis of various physical, psychological and social predictors primarily highlighted three main results:

³⁰ Cf. Robert E. Leu, Stefan Burri, Tom Priester (1997) Lebensqualität und Armut in der Schweiz, Berne: Haupt; Theodor Abelin, Valerie Beer, Felix Gurtner (eds.) (1998) Gesundheit der Betagten in der Schweiz, Results of the Swiss Health Survey of 1992/93, Berne: Haupt

³¹ Pasqualina Perrig-Chiello (1997) Wohlbefinden im Alter. Physical, psychological and social determinants and resources, Weinheim: Juventa.

1. The significance of convictions regarding the ability to influence one's own life and memory self-assessment: The assessment of one's own memory skills as well as the conviction of being able to influence one's own life in old age are central to the well-being of young pensioners. In the case of the elderly, the topic of control and fate play an even more significant role: the less the elderly person sees him- or herself dependent on fate and the more he/she can influence his/her life, the higher is the sense of well-being.
2. The influence of life events and social networks: As expected, negative life events show a negative influence on the well-being of older people. In the case of the interviewees aged 65-74, a high sense of well-being was also associated with a high respect for social contacts. In those aged 75 and above, in contrast, well-being was linked with the certainty that they could fall back upon a partner or close relatives in an emergency.
3. The role of constitution and health-related behaviour: In older people, a fragile physical build, high biological age³² and exhaustion are accompanied by a low sense of well-being. In the younger age group (65-74), a high level of physical activity, in the elderly (75 years old and above), in contrast, low use of medication was linked with a better sense of well-being. The number of cigarettes smoked per day in 1971 was also negatively associated with the physical sense of well-being over twenty years later.

Physical well-being

The detailed analysis revealed three central aspects:

1. Physical well-being is strongly affected by subjectivity: The use of medication proved to be more strongly associated with worse physical well-being than with objective health indicators. It is not the person who is actually sicker who takes more medication but rather the person who feels sicker. The IDA study, moreover, shows that there is no significant connection between a person's assessment of his state of health and his objective state of health. This finding is consistent with the series of papers which found weak, or no connections, at all between subjective and objective health.
2. Healthy ageing is embodied in our biography: The health indicators investigated earlier explained a considerable part of the current physical well-being. Thus, high blood pressure and a low vitamin B1-alpha blood level – as measured in 1971 – were associated with worse physical well-being more than 20 years later. Also the prophylactic values of earlier health behaviour were visible in the sense that regular consumption of tranquilizers and heavy smoking contributed to reduced good health even two decades later.
3. Sickness in old age is not fate: As expected, convictions regarding the ability to influence sickness and health were a significant factor. Better physical well-being in older people was linked to self-responsibility and the conviction that one could call on the doctor and medication for the preservation of one's own health. In contrast, older people with a worse sense of physical well-being were more convinced of the fateful nature of health and sickness.

The comparison between younger and older interviewees showed some interesting differences. For example, the subjective assessment of memory was an important factor influencing psychological well-being in the 'young old' (65 –74), but not, however, in the 75 year-old people and older. In contrast, health-related convictions became more important in the elderly.

³² Indicated by less thick folds in the skin on the back of the hand.

Reciprocal influences are possible in very old age: on the one hand, the feeling that one can still do something actively for one's health in old age increases well-being. On the other hand, the appearance of massive health problems in very old age reduces the conviction that one can do very much in this sphere.

On the whole, it is clear that the saying 'mens sana in corpore sano' (a healthy spirit in a healthy body) primarily applies to the 65-74 year olds. Also in the case of the 'young old', it is less the objective physical health indicators than the people's own subjective assessments that are important. In contrast, psychological well-being is no longer dependent on subjective health assessment in the elderly. What is more important is mental power, .i.e. on the one hand, the feeling of control over health and sickness and, on the other hand, the feeling of being in harmony with one's own past. Furthermore, in very old age, as shown in an additional study, there is an increased significance in having a rhythm in one's daily, weekly and annual routine. By organizing temporal conditions rhythmically, people try to make their own lives more predictable and easier to control. In the case of older people, it is important to have a well-organized daily and weekly rhythm, above all if they assess their physical condition as bad. A good daily and weekly rhythm is thus an important element of quality of life, particularly in situations of reduced health and functional autonomy.

2 Sporting activity and well-being

Numerous research results and observations made in the course of therapy and rehabilitation provide proof of the positive effects of physical exercise and sport on the state of health of older people. Physical training has a beneficial effect on numerous degenerative processes and a positive influence on physical fitness. Physical exercise can thus have a preventive effect on the incidence of serious illnesses in old age. The IDA study also showed a clear link between sporting activity and physical strength; either because primarily strong people do sport; or because selective physical training brings a significant increase in strength.

The connection between sporting activity and psychological well-being in old age is less clear than the link between training and physical fitness. In order to examine the relationship between sporting activity and well-being in old age, a study was carried out with 46 people aged between 66 and 88 years old within the framework of the IDA study: 23 persons took part in an eight-week course of muscle training while the other 23 functioned as a control group. The muscle training, carried out once weekly, consisted of eight different exercises on exercise machines. Following a ten-minute warming-up phase, the individual training units lasted for about 90 minutes.³³

On the whole, this study showed very few differences with regard to well-being, nervousness, memory assessment etc. which could be clearly ascribed to the strenuous exercise. It was shown that an eight-week training course leads, at the most, to a limited general improvement in well-being. Changes were shown, however, in the perception of their life and their environment: those participating in the muscle training were less anxious after training, less worried about the future and felt that their lives were more fulfilled than before the training.

³³ Franziska Krings (1995) Sportliche Aktivität und Wohlbefinden im Alter, dissertation at the Institute for Psychology, Basel: University of Basel (mimeo).

No doubt these effects were less ascribable to the exercise itself and more to the social surroundings of the training: the training sessions took place in a modern fitness studio almost exclusively visited by young people, whereby the training increased confidence that the participants could also tackle new and youth-orientated situations. The social surroundings of physical activities are just as important as the physical training itself.

3 Memory performance and memory training

Preserving cognitive ability— particularly memory performance – is an important condition for maintaining autonomy in old age. The fear of mental deterioration is widespread among many ageing people, all the more as memory loss is often wrongly seen as an inevitable consequence of very old age. Memory losses do become more frequent with increasing age but such changes are, on the one hand, subject to enormous individual differences. On the other hand, not all memory functions are affected to the same extent. The IDA project developed a computer-controlled memory test which can be used over the whole life-span. Various memory functions were measured (such as implicit and explicit memory, working memory, attention and speed of reactions as well as recognition) with recourse to modern information-processing models.³⁴

The results of this study can be summarized as follows: with regard to implicit memory there are, as a rule, no changes up to a very old age. Implicit memory is a form of automatic use of experience which is created without any effort to remember and often without any awareness of remembering. Even if, in an extreme case, elderly people forget things again immediately, learning is still taking place. Knowledge stored in long-term memory or crystalline intelligence (measured by vocabulary, for example) can also be successfully used for the most part up to a very old age with relatively slight losses. However, strong losses correlated with age were shown in episodic memory performance and really dramatic losses in very old age were found in processing speed and capacity. It seems as if the attention capacity available at a certain moment and the related processing speed represent a bottle-neck of human ability to think.

On the whole, it is clear that cognitive functions and memory in old age are particularly negatively affected when old people work under pressure of time, when various activities have to be carried out simultaneously, or when elderly people have to remember something without additional aids. In contrast, the automatic storage and use of experience function just as well in healthy old people as in young adults. Or in other words: learning is also possible at a very old age if enough time is taken and reference is made to earlier experiences.

Objective health indicators and memory performance in old age correlate positively in this study. Health-related factors thus contribute to the clarification of individual differences in the cognitive efficiency of people of the same age. In particular muscle power proved to be a significant positive influence factor, above all for short and long term memory. Physical strength and thus also physical training improve memory performance in old age. Also antioxidant vitamins (ascorbic acid, beta-carotin and alpha-tocopherol) were tendentially

³⁴ Cf. Vera Kling (1996) Kognitive Leistungsmessung bei alten Menschen. Validation of the GFT-Gedächtnis-Funktions-Tests (Memory Function Test), dissertation, Basel: University of Basel.

positively associated with the long-term memories of older people. The ECG values did not show any direct influence on the memory functions examined, neither did blood pressure, nor contrary to expectations did Vitamin E.³⁵

Memory training

An increasing number of older and elderly people do not sit and wait for memory losses as part of their fate, but they try to actively combat such losses. In recent years, a wide range of different forms of memory programs have been created for older people. We can distinguish between training programs which concentrate on the training of isolated memory functions (focal point mnemonic techniques) and programs which increasingly integrate the personal requirements for learning (such as openness, perceptions of performance, etc.). There has been criticism in particular, that pure memory training programs are unrealistic and too short. According to new approaches to memory improvement, psychological and physiological requirements for learning (emotional attitudes, physical fitness, perceptual conditions, etc.) also need to be integrated alongside learning and memory techniques.

The IDA project employed a multi-modal method of memory training of this kind, in which the ten-week training course aimed at optimizing both the cognitive and emotional requirements for learning (e.g. via role-playing). Comparing the training group (23 persons aged 72 years old on average) with a control group of the same age showed a significant increase in performance in the training group with regard to the recognition of words and symbols but not in free memory. At the end of the training period, moreover, there was better understanding of the way the memory functions and, linked with this, a better assessment of changes in memory as well as a revitalization of forgotten perceptions (such as the senses of taste and smell). As a side effect, however, it was shown that the different needs of men and women should be more selectively tackled in order to prevent women being 'mown down' in training by male structures.³⁶

4 Depression and depressive symptoms

Depression is a frequent topic of psycho-geriatrics, and relevant studies point to an increased risk of depression in certain groups of older people. As depression is often associated with cognitive losses and disorders, in individual cases it can be difficult to allocate cognitive deficiencies in old age clearly to either dementia or depressive illness. In order to obtain a clear assessment of the frequency in old age of dementia and/or depressive disorders, an epidemiological study in the AHV pensioners of two cantons was conducted within the framework of the NRP 32.³⁷ In the years 1995 and 1996, 921 surveys were carried out with people aged 65 and older (incl. people in institutions) in the cantons of Geneva and Zurich.

³⁵ Cf. Walter Perrig, Pasqualina Perrig-Chiello, Hannes B. Stähelin (1997) The relation between antioxidants and memory performance in the old and very old, *Journal of the American Geriatrics Society*, 45,6: 718-724

³⁶ Andrea Kaiser (1995) Multifunktionales Gedächtnis- und Reattributionstraining im Alter, dissertation, Institute for Psychology, Basel: University of Basel.

³⁷ NRP 32 Study Démence, dépression, handicap et maintien des facultés cognitives chez la personne âgée / Demenz, Depression, Handicap und Erhaltung kognitiver Fähigkeiten im Alter: eine epidemiologische Untersuchung. Applicants: François R. Herrmann (Geneva), Jean-Pierre

Pathological depression was rare in the population surveyed. The frequency of pathological depression according to ICD classification amounted to only 2%. More frequent than pathological depression are depressive symptoms. On the basis of a comprehensive analysis of available study results, Christian Adam³⁸ estimates that serious depression in old age amounts to one-third, less serious depression, in contrast, to two-thirds of all cases. In the NRP Study 32, depressive symptoms were measured by the 'Psycho-geriatric Assessment Scale' (PAS), whereby the presence of more than three depressive symptoms points to an increased risk of a depressive illness. This was the case in 4% of men aged 65 and above and in 10% of the women recorded. The difference between the sexes remained significant in the Swiss study, even after controlling for the effect of other variables, and was thus consistent with other studies which point to a twice as high risk of depression in older women as in men of the same age. On the one hand, this reflects a difference between the sexes with regard to stress and strain. On average, women experience more stress and are more frequently exposed to life-threatening events (such as bereavement). On the other hand, there are differences in the way problems and stress are tackled. Thus, women react more frequently to problematic situations with depressive symptoms, whereas men react more aggressively – also towards themselves. This is why women show depressive symptoms more frequently, but men more often commit suicide.

However, the thesis that depressive symptoms increase with age was not supported. The increased frequency of depressive mood disorders in elderly people is less linked to old age itself but more dependent on critical life-events (bereavement, one's own illness). To equate age and depression thus proves to be a grave mistake.

The comparison over time carried out within the framework of the Geneva 'Centre Interfacultaire de Gérontologie' (CIG) with AHV pensioners in Geneva and the Valais shows, moreover, that depressive symptoms reduced in significance between 1979 and 1994. Thus, significantly fewer pensioners suffer today from tiredness and sadness than 15 years ago.³⁹ The reasons for the better psychological well-being, or the reduction in depressive mood disorders, partly reflect economic and social improvements from which today's pensioners can benefit. They also reflect changes in social background, in personal skills and resources as well as in the health situation of modern pensioners.

Michel (Geneva), Felix Gutzwiller (Zurich), Alexander Scott Henderson (Canberra), NR Project 4032-042654, final report, Geneva 1997 (mimeo). This project also received financial funding from the Swiss Alzheimer's Association.

³⁸ Christian Adam (1998) *Depressive Störungen im Alter. Epidemiological and social conditions*, Weinheim: Juventa

³⁹ For Geneva: Christian Lalive d'Epinay, Jean-François Bickel, Carole Maystre, Jean-François Riand, Nathalie Vollenwyder (1997) *Les personnes âgées à Genève 1979-1994. Santé, famille, réseaux d'aide et de soins. Les cahiers de la santé, No. 8*, Geneva: Dép. de l'action sociale et de la santé. For the Valais: Christian Lalive d'Epinay, Carole Maystre, Hermann-Michel Hagmann, Jean-François Riand, Astrid Stuckelberger (1997) *Etat de santé et reseaux d'aide de la population âgée en Valais central*, in: Hermann-Michel Hagmann, Jean-Pierre Fragnière (eds.) *Maintien à domicile. Le temps de l'affirmation*, Lausanne: Réalités Sociales: 97-120.

5 Dementia

Psychological and cognitive disorders are not a part of the normal ageing process but the risk of neurological illness is considerable, especially in very old people. Neurological disorders in old people in their various forms (Alzheimer's disease, vascular dementia, psycho-organic syndrome POS) have long been recognized as one of the central problems in the field of public health.

The epidemiological study⁴⁰ carried out in Geneva and Zurich showed that there are no significant differences in the frequency of dementia in the two language regions. As more women than men reach a very old age, the majority of dementia patients is female. The level of education in the generations investigated is significantly lower in the women than in the men, which is insofar relevant as measurable cognitive deficiencies appear sooner in people with a lower level of education. After statistically controlling for the effect of age and educational background, however, differences between the sexes were not shown to be significant. This points to the fact that the risk of neurological disorders does not vary on grounds of sex.

In contrast, the presence of one or two ApoE4 markers was associated with a 3.9 times higher risk of dementia. Thus a reference to a specific biogenetic component is given. It is the gene for the apolipo protein E (ApoE); i.e. a protein that plays an important role in lipid metabolism. There have been speculations for years with regard to the role of ApoE protein in the development of Alzheimer's disease. It has long been known that there are three different variants (allele) of the ApoE gene, which are named ApoE2, 3 and 4. Genetic studies point to the fact that hereditary transmission of the allele ApoE4 is linked both with a higher risk of illness and with early onset. The NRP 32 study also supports this future research direction.

Of the women and men aged over 65 investigated in Geneva and Zurich, a good 8% suffered from dementia. In fact, it was also shown in this study that there was a sharp increase in the frequency of dementia with rising age. A conversion of the frequency values to the whole of Switzerland shows that at present an estimated figure of over 80,000 pensioners are suffering from neurological disorders. In view of the growing number of very old people, we can expect an increasing number of people with dementia in the coming years, which represents an enormous challenge for community and residential care of the elderly. The proportion of residential and nursing home residents with dementia will continue to rise and, in the year 2000, an estimated 60% of all residential and nursing home residents could suffer from neurological brain disorders.

6 Main results and perspectives

Older people in Switzerland are often characterized by a high level of well-being. Old age itself does not lead to a reduction in psychological well-being. The saying 'a healthy spirit in a healthy body' applies above all to people aged under 75. On the one hand, it is clear that

⁴⁰ François Herrmann, Jean-Pierre Michel, Felix Gutzwiller, A.S. Henderson (1997) Démence, dépression, handicap et maintien des facultés cognitives chez la personne âgée, NR Project 4032-042654, final report, Geneva: mimeo.

healthy ageing is incorporated in one's biography and that it is less the objective state of health that is significant for personal well-being rather one's own subjective assessment. In people aged over 75, psychological well-being is closely linked to mental power, i.e. on the one hand, with the feeling of being in control of one's health and illness and, on the other hand, the feeling of being in harmony with one's own past.

Sporting activities and physical exercise have a clear positive effect on the state of health of older people. The effects of sporting activities on psychological well-being are less clear. A pilot study showed that training in a modern fitness studio which was frequented by young people increased confidence.

Memory losses are more frequent with increasing age but they are subject to enormous individual variations. Moreover, not all memory functions are affected equally. Thus the automatic storage and use of experience in healthy old people is just as good as in young adults.

Learning is also possible in very old age if enough time is taken and previous experience is taken into account. Memory training is more successful if, in addition to learning and memory techniques, psychological and physiological requirements for learning (emotional attitudes, revitalization of the senses of touch and smell etc.) are also integrated. In order to prevent women being 'mown down' in training by male structures, memory training should be more selectively aimed at the different learning conditions and needs of women and men.

Pathological depression is also rare in old age. Depressive mood disorders are more frequent, particularly in women. The increased frequency of depressive mood disorders in older people, however, is not linked to old age itself. Critical life-events (bereavement, death of close friends, one's own illness etc.) are more important. In a comparison over time, it is clear that today's pensioners are better off psychologically than earlier generations of pensioners.

Neurological illness is not a part of the normal ageing process, but the risk of neurological illness (dementia) increases with rising age. At present, over 80,000 pensioners are suffering from neurological disorders and, in view of the rising number of very old people, dementia presents community and residential care of the elderly with an enormous challenge. At present, dementia cannot be prophylactically prevented but there are increasingly more medical and therapeutic procedures for the deceleration and relief of dementia. At the same time, it is of prime importance that the dignity of people suffering from dementia is also preserved.

E. Physical well-being in old age

1 Demographic ageing and health costs

At first sight, there are close links between rising demographic ageing and rising health expenditure, as the majority of health and care costs arise in old age. An increasing number of old, and above all, very old women and men lead, it is argued, to increased expenditure on health and social care. In fact, only a comparatively small proportion of the increase in expenditure in the health sector is directly due to demographic shifts. Swiss data show that

between 1971 and 1991 only one-fifth of increasing costs in health insurance was caused by demographic ageing.⁴¹ A health-economic analysis carried out within the framework of the NRP 32⁴² shows that age loses its influence on health expenditure when the time remaining to live is taken into account. It is primarily the proximity of the point of death which makes health costs soar. Today, it is estimated that health costs in the last year of life amount to between 25-30% of all health costs in Switzerland with the costs of medical care of dying patients exceeding average health expenditure in Switzerland several times over. The detailed analysis showed that the health costs arising in the last year of life vary very little according to age. The costs for the last year of life are relatively independent of whether somebody dies at the age of 70, 80 or 90. The health economists Stefan Felder and Peter Zweifel conclude from their analysis of illness costs that the connection between age and health costs has little to do with calendar age but is due to the combined effect of the increasing death rate in old age and the high costs of the final phase of life, irrespective of age. This view additionally relativizes the often cited links between health costs, age and demographic ageing. For this reason, horror scenarios prophesying an explosion of health expenditure as a result of the demographic development could prove to be wrong.

2. Physical well-being in older and very old people

Health and illness in old age are many-sided phenomena. We would like to point out here that the equation 'old=sick' does not apply. Illnesses, infirmities and disabilities are more frequent in old age but mostly it is not old age alone that is decisive. Social and biographical factors are just as important. Modern gerontological research points to four central facts: firstly, illness in old age is not fate but often based on a person's biography. Secondly, the physical well-being of older people is strongly subjective in nature. Thirdly, health processes do not run in a linear fashion in old age and the conception of an irrevocable reduction in health with increasing age is wrong. Fourthly, even in the case of very old people there are many, so far little used possibilities of health intervention and rehabilitation.

Health assessment of older people

With rising age, more and more women and men evaluate their own health as mediocre or bad; it is perhaps surprising, however, how many older people assess their health positively. According to the Swiss Health Survey of 1991/92, 72% of pensioners aged between 65 and 79 living at home evaluated their state of health as good to very good. Even in the very old (85 years old and above) 62% still did so. In the Swiss Health Survey of 1992/93, older and very old men evaluated their health as slightly better than women of the same age. One main reason for the sex difference lies in the fact that women more frequently suffer from physical infirmities in old age than men. At the same time, the elderly people from the French-speaking part of Switzerland evaluated their state of health as worse than those in the German-speaking

⁴¹ Cf. Federal Statistical Office (1996) Herausforderung Bevölkerungswandel. Perspektiven für die Schweiz, Berne: 102.

⁴² Cf. Peter Zweifel, Stefan Felder (eds.) (1996) Eine ökonomische Analyse des Alterungsprozesses, Berne: Haupt.

part.⁴³ Moreover, the comparative study carried out in Geneva and Central Valais showed that the proportion of older people who evaluated their health as bad clearly fell between 1979 and 1994. In contrast, the proportion of older people who considered their state of health to be good rose.⁴⁴ These results show that the health assessment of older people has developed in a thoroughly positive direction in recent decades.

Frequent physical infirmities and sensory problems

The most frequent infirmities in older and elderly people are joint problems, back pain, sleeping disorders, as well as general weakness and tiredness. Detailed analyses show that, until the age of 85, the risk of serious physical infirmities is not significantly linked to age. The large disparities on the grounds of sex are striking. In the Health Survey of 1992/93, slightly less than one in two women over 75 mentioned physical infirmities, whereas only every fourth man of the same age did so. One reason is that older women suffer more frequently than men from protracted chronic illnesses (such as rheumatism, back pain and sleeping disorders). On the other hand, life-long but also current social inequalities have an effect, and older people with lower incomes suffer more than the average from physical infirmity and disability. Sensory problems also occur more frequently in old age, leading partly to massive restrictions as far as social communication is concerned. Visual problems are very common, above all in over 84-year-old men and women. Visual disability in old age is mostly a consequence of the physiological process of ageing, whereby first the elasticity of the lens – which regulates the ability of the eye to adjust – deteriorates. Later cataracts or opacity of the vitreous body can occur. In the case of advanced cataracts, the lens can be replaced by a synthetic one and in fact cataract operations are among the most frequent operations performed on elderly people today.

3 Hearing problems and communication limitations

The decline in the ability to hear is a common disorder in elderly people. In many cases a hearing disability can today be compensated by the use of a hearing aid. The data of the Swiss Health Survey of 1992/93 show, however, that hearing aids are only used by a proportion of elderly people with defective hearing. The detailed analysis shows clearly that considerably fewer elderly people with defective hearing use an aid in the western part of Switzerland. An above-average number of men without professional training also live with an uncompensated hearing deficiency. Obviously, social and cultural factors play a role as to whether someone with hearing difficulties uses a hearing aid.

Physiological ageing processes in the area of the ear canals, as yet not completely explained, play a role in the occurrence of hearing problems in older people. However, the effect of internal and external factors (such as lifelong aggravation by noise, nicotine and diet) is also of

⁴³ On the health of older men and women living at home, cf. in particular: Theodor Abelin, Valerie Beer, Felix Gurtner, (eds.) (1998) *Gesundheit der Betagten in der Schweiz*, results of the Swiss Health Survey of 1992/93, Berne: Haupt

⁴⁴ Cf. Ch. Lalive d'Epinay, C. Maystre, J.-F. Bickel, J.-P. Michel, J.-F. Riand (1997) *Un bilan de santé de la population âgée. Comparison between two regions of Switzerland and analysis of the changes over fifteen years (1979-1994)*, *Cahiers médico-sociaux*, 41:109-131

importance. The clinical picture of hearing deficiency in old age (presbycusis) is characterized by a symmetrical loss of hearing, in particular in the sphere of higher frequencies.

A further feature of hearing deficiency in old age is an impaired understanding of the spoken word, above all against a noisy background. Many of those affected feel restricted in communication and withdraw from their customary social network. The consequences can be a breakdown in communication and social isolation.

At the HNO University Clinic of the Cantonal Hospital in Basel, an exploratory study was carried out as part of an NRP 32 project on 201 people aged over 60 who had experienced a deterioration in their hearing.⁴⁵ The aim of the study was to compile an inventory of the communication disorders and needs of older people suffering from an age-related loss of hearing. The main focus was the relationship between the hearing loss measured and the subjectively perceived disability. This was based on the experience that, particularly in old age, actual hearing and communication problems are inadequately recorded with the usual testing methods, which sometimes leads to unsatisfactory interventions. Thus the extent of the functional impairment (understanding speech, reception of other auditory signals such as telephones, bells, music etc.) is also influenced by the lifestyle and social situation. The consequences of a hearing loss are thus determined by individual factors (such as communicative skills, emotional state) and by the environment (such as the behaviour of family and friends). The individual situation of those affected is therefore to be taken into account in audiological counselling and care.

In addition to, audiological measurements, the study also used a newly developed audiometric speech test, the 'Basel sentence test', in order to register the impairment of linguistic-auditory communication during disturbing noise (simple, everyday sentences were recorded with a continuous disturbing background noise). This took into account a problem experienced particularly by elderly people: impaired understanding of speech in a loud environment (e.g. at a party, in public, etc.).

The results of the population investigated (109 men and 92 women with an average age of 72.7 years old) showed the classically expected picture of a continual deterioration in the ability to hear, above all in the higher frequencies. The comparison of the subjective hearing loss and understanding of speech showed that, as a rule, a hearing loss of below 30 decibels does not have a great influence on everyday speech understanding. It is not until a hearing loss of over 30 decibels is recorded that an increasing impairment of speech understanding rapidly sets in.

Large variations in the perception of a hearing handicap were shown, proving that individual people react differently to hearing loss. The extent of impairment experienced was only partly determined by the level of hearing loss, factors such as personality, emotionality, social

⁴⁵ Cf. S. Bertoli, R. Probst (1995) *Troubles de la communication auditive liés au vieillissement*, *Médecine & Hygiène*, 53/2094: 2374-2378; S. Bertoli, R. Probst, P. Jordan (1996) *Das Hörhandicap – eine Ergänzung zum audiometrischen Hörverlust*. Results of an explorative study on auditory communication disturbances in old age, *HNO* 44: 3376-384; S. Bertoli, R. Probst (1997) *The role of TEOAE testing in the evaluation of elderly persons*, *Ear & Hearing* 18: 286-293.

functions and communication needs also played a role. An explanation based on audiological test results alone does not meet the needs of the patient in approximately one-third of cases. It is not uncommon for patients to be fitted with a hearing aid on the basis of purely audiological tests and for the gadget to subsequently disappear into a drawer, whereas other patients who complain about problems in everyday communication are fobbed off with a reference to only slight hearing losses. An important condition for the acceptance of therapeutic or rehabilitative measures in hearing problems is less the objective loss than the perception of functional limitations. For this reason, audiological examinations need to be supplemented by a hearing handicap questionnaire and there are, in fact, plans to use the hearing handicap questionnaire elaborated in the project as an integral part of experts' reports on hearing aids for the IV and AHV.

4. Health-related behaviour of older people

The term 'health-related behaviour' refers to various types of behaviour and habits relevant to health. Within the framework of the Swiss Health Survey 1992/93, the following aspects of health-related behaviour were examined: diet, physical activity, the consumption of alcohol, tobacco and medicine. Weight was also examined, as excessive weight represents an important risk factor for cardio-vascular problems.⁴⁶

Diet: Firstly, it was shown that women pay more attention to a healthy diet than men and secondly, that elderly people are somewhat more diet conscious than younger people. The biggest differences between the age groups are shown in the consumption of fat and in the avoidance of salt. Diet awareness is more frequent in people with a higher education. A high risk group often associated with bad dietary habits is elderly single men. In contrast, elderly single women pay more attention to a healthy diet.

Excess weight: Generally older and elderly people suffer more frequently from excess weight than younger people, and about 50% of male pensioners and 38% of female pensioners are shown to be overweight. However, only approximately every tenth older person is actually obese. Excess weight is also closely linked with social factors and with rising levels of education the proportion of overweight older people falls.

Physical activity: also promotes good health later in life; either as a way of avoiding excessive weight; or because physical training brings an increase in strength. The health-related and preventive value of dynamic perseverance training – which is characterized by constant alternation between tensing and relaxing the muscles – is generally recognized.⁴⁷ As expected, the frequency of physical activity diminishes in the very old age groups. However, the lower frequency of sporting or physical activity with increasing age does not only reflect an effect of ageing (more disabilities and health-related limitations which restrict mobility etc.) but also a generation-related change: many older people do less sport than younger ones because in this generation sport was not as customary in their youth. As with other aspects of health-related

⁴⁶ Cf. in particular: Th. Abelin, V. Beer, F. Gurtner (eds.) (1998) *Gesundheit der Betagten in der Schweiz*, results of the Swiss Health Survey of 1992/93, Berne: Haupt: 51ff.

⁴⁷ On sport in old age cf. M.-J. Manidi Faes (1998) *Le sport tout au long de la vie*. The sporting paths of seniors in the Canton of Geneva, Lausanne: Réalités Sociales.

behaviour, 1992/1993 showed clear links with the general social situation, and older people with a higher education and higher income do more physical exercise.

Alcohol consumption: Whereas in male pensioners the proportion of teetotallers is low (9%) and the proportion of those who consume alcohol at least once a day is high (44%), there are more teetotallers among female pensioners (32%) and fewer of those who consume alcohol at least once a day (18%). Additional questions given to the under 75 year olds showed that in 1992/93 about 12% of men aged between 65-74 had massive alcohol problems compared to only 2% of women of the same age. For both sexes the consumption of alcohol varied according to the linguistic region. Thus, the proportion of pensioners consuming alcoholic drinks daily is clearly higher in Western Switzerland and the Ticino than in the German-speaking part of Switzerland.

Tobacco consumption: There are also clear differences between the sexes in the consumption of tobacco: 24% of male pensioners and 8% of female pensioners smoke, **5% respectively 2% of whom smoke 20 or more cigarettes a day**. Whereas older female non-smokers clearly make up the majority (80%), the ex-smokers make up the majority in the men (49%). The smoking habits of many older people have changed in the course of their lives: many of today's pensioners smoked in their youth and in young adulthood, yet have become non-smokers in later life due to better information about the dangers of smoking.

The risk of cardio-vascular diseases, lung cancer among other things, is strongly dependent on behaviour. There is thus a large preventive potential with regard to many causes of premature death. According to researchers, up to 70% of illnesses can be avoided by leading a life without tobacco and by eating a healthy diet. An important cause for the higher life expectation of women is the fact that they live more health consciously than men.

Use of medication: The use of medication rises significantly with age. Up to the age of 80, medication predominantly for heart/blood pressure are used, followed by sleeping tablets/tranquilizers and pain/rheumatism remedies, as well as vitamins and tonics. A significant increase in the use of vitamin preparations and tonics has been registered in over 85-year-old men and women. Greater use of medication by elderly people living alone at home was also recorded in other NRP 32 projects. Thus, only 13% of the men and women interviewed within the framework of the interdisciplinary Basel longitudinal study took nothing, although in this study population a selection of elderly people with positive health indications was investigated. 12% occasionally used a form of medication, and the remaining 75% regularly took one or other form of medication. The initial survey (1993-94), carried out within the scope of the EIGER project, of 791 men and women aged 75 and older and living at home also showed high levels of medication use for the Berne region. On average, these elderly people simultaneously consumed 3.8 medicines (with a range of 0 to 20 medicines). Of these, an average of 2.7 (range 0-8) required a prescription and 1.1 medicines (range 0-8) did not require a prescription. The proportion of 75-year-old and older people living at home who took or had to take more than 5 medicines at the same time was considerable (23% of the men, 17% of the women).

In all the studies carried out for Switzerland there were clear sex differences with regard to the consumption of medicine, with women consuming more medication than men of the same age.

The detailed analysis of the EIGER initial survey showed, particularly in women, a highly significant additional consumption of vitamins/minerals as well as of Benzodiazepine (against anxiety symptoms) and non-steroid anti-inflammation remedies.⁴⁸ Benzodiazepine, in particular preparations with long-term effects, is linked in old age with an increased risk of falls and impairment of cognitive function.

The question as to whether elderly people consume too much medication cannot be answered in a general manner. Medication can be both a part of the solution and a part of the problem. The Swiss Health Survey of 1992/93, however, suggests that medication is sometimes prescribed too frequently. In particular an excessive quantity of sleeping tablets and tranquilizers is prescribed for elderly people, especially for women. In contrast, results of the EIGER study point to a possible under-treatment of elderly men with depressive symptoms.

5 Care needs and the extent to which these are met⁴⁹

Infirmities and influences causing problems in elderly people: 40% to over 50% of the elderly population mention joint pains. This is followed by back pain in over 15% of the women and 10% of the men aged over 65. Approximately 17% of older women and 8% of older men are affected by sleeping disorders. The frequency rises with age and reaches 20% in men and women over 85.

12% of the women and 6% of the men aged between 65-74 reported accidents suffered in their home and garden in the past 12 months. Thus, such accidents are more frequent than in traffic, during sport or at work.

10% of the older women and 3% of the older men had suffered limitations or falls due to dizziness (which is also due to the frequent consumption of sleeping tablets and tranquilizers).

With increasing age, trouble with road traffic rises sharply. Elderly men and women cite traffic noise (around 40%) and traffic exhaust fumes (around 20%) which is more frequently cited than in other age groups.

Need for care: Functional limitations in the ability to get dressed, to eat or get up alone are the main factors that lead to the need for care in elderly people. A computer projection for the whole of Switzerland shows that in 1992/93 a good 3% of the AHV pensioners living in their own household were dependent on assistance for one of these basic everyday activities. One-third of these elderly people in need of care lived alone.

In 1992/93 in Switzerland, if additional cognitive disabilities (e.g. due to dementia) are taken into account, approximately 7.7% of the elderly people living at home (65 years old and above) were, from a physical and/or cognitive point of view, dependent on the assistance of

⁴⁸ Cf. A.E. Stuck, B.D. Gloor, D.H. Pfluger et al. (1995) Geschlechtsunterschiede in Medikamentenkonsum bei über 75 jährigen Personen zu Hause: An epidemiological investigation in Berne, Zeitschrift für Gerontologie und Geriatrie, 28: 394-400.

⁴⁹ Source: Theodor Abelin, Valerie Beer, Felix Gurtner (eds.) (1998) Gesundheit der Betagten in der Schweiz, results of the Swiss Health Survey of 1992/1993, Berne: Haupt.

other people for basic everyday activities. In 1992/93, this amounted to an extrapolated estimate of 70,000 AHV pensioners.

Taking into account the older and elderly people living in institutional households (in 1990 just under 75,000 people) it is apparent that 10%-14% of the over 65 year olds suffer from considerable functional disabilities. In absolute figures, at present (1999) this represents between 110,000 to 127,000 people. About half of these considerably disabled older and elderly people continue to live at home.

Unmet needs: Among the Swiss-German AHV pensioners who were interviewed on this question, there are unmet needs in 1.7% of the men and 4.8% of the women. Related to those who need assistance, there was one in four women (25.9%) and one in eight men (12.6%). The risk of an unmet need for care rises with age. It is higher in persons living without a partner and in elderly people with medium or low levels of education. A computer projection for the whole of Switzerland shows over 30,000 older people with an unmet need for care, over 10,000 of whom are 65-74 years old, 16,000 are 75-84 years old and over 5,000 are over 85 years. The largest component of the unmet need is domestic help which is not reimbursed by the current social and health insurance system.

Sufficiently and insufficiently used possibilities: One positive finding of the study is that nearly all Swiss aged over 65 years old (99.6%) have already had their blood pressure measured at least once, and in over 80% this was recorded in the last 12 months. Thus the Swiss population is well served by this important measure aimed at preventing cardio-vascular diseases.

However, other studies – in particular the Berne EIGER Project – show that high blood pressure was effectively treated only in some cases. For an optimal prevention of strokes and other consequences of high blood pressure, the treatment of hypertension should be organized more efficiently, not least by measures for controlling weight.

Means of improving the quality of hearing are often not adopted. Thus, approximately one-quarter of older men and women with a hearing disability do not have a hearing aid (although the use of hearing aids makes a positive contribution to the quality of life for those with impaired hearing). It is of practical significance that in the Romandie (the French-speaking part of Switzerland) the proportion of elderly people with hearing deficiencies without a hearing aid is three times higher than in the German-speaking part of the country.

On the other hand, there have also been signs of an over-protection of older people. Thus in Switzerland excessive quantities of sleeping tablets and tranquilizers are prescribed for elderly people, especially for elderly women. It is problematic that the incidence of dizziness and its dangerous consequences (e.g. falls) is 60% higher in consumers of sleeping tablets and tranquilizers than in non-consumers. An important measure was taken recently: since 1st July 1996 the prescription of Benzodiazepine has been subject to stricter regulations according to the partly-revised law on narcotics. Another approach could be changes to prescription practice via the further and advanced training of all doctors (not only family doctors, but also hospital doctors and specialists).

Prevention in old age: useful and superfluous aspects: Art. 26 of the new health insurance law governs the introduction of the remuneration of preventive services performed in the doctor's practice or by other appropriate professions. We should be aware that, although prevention in old age has a lot to do with prevention in earlier years, certain measures are no longer indicated in very old people, whereas other measures, specifically conceived for the elderly come to the fore:

(a) prevention aimed specifically at the elderly: preventive geriatric assessment: There are ways of preventing illnesses and disabilities in old age. Above all, this involves the early recognition of infirmities that are typical for the elderly, disabilities and unfavourable circumstances and the right measures for these situations. There are widespread situations in which this kind of preventive help can be useful.

(b) recommended preventive-medical services: various preventive measures also carried out in other age or high risk groups should be continued in old age. Among these are the detection and treatment of high blood pressure, breast examinations (mammography, however, only between the ages of 50 and 70), vaccination against flu, counselling in particular with regard to diet, advice on giving up smoking, alcohol and medication. The preventive-medical care of the older population in Switzerland can be significantly improved.

(c) wrongly applied preventive services: The unsystematic nature of preventive-medical care in Switzerland is shown not only by inadequate implementation of recommended measures but also by the frequent implementation of measures whose effectiveness is not proven and which are not recommended, at least not in old age. Among these are the measurement of cholesterol, which only seems meaningful for the investigation of special risk situations. Nevertheless, it is apparent that the cholesterol level had been measured at least once in over 85% of the over 65 year olds, and that this continues to be measured even in very old people. Screening examinations of the prostate are not recommended for older men, but 30-33% of the men aged between 65-84 report prostate examinations carried out within the past 12 months. Finally, in the Romandie, nearly 15% of the over 65-year-old women report that they had had a mammography in the past 12 months. This also seems to be largely a case of screening examinations without grounds for suspicion, which does not correspond with recommendations for this age.

6 Disabilities caused by accidents: the elderly after fractures of the proximal femur

Due to osteoporosis, the danger of fracturing the femur is very high in old age, particularly in women. The risk of such a fracture is especially pronounced in elderly people suffering from dizzy spells. It is of practical significance that elderly people who consume sleeping tablets or tranquilizers prescribed by the doctor every day experience dizziness more frequently and thus report the consequences (limitations, falls) more often.

Due to increased life expectancy, the frequency of fractures of the femur is likely to continue rising. Injuries caused by falls very often have protracted social consequences for elderly people (interruption of normal daily life, social disintegration, committal to a home). Within the framework of an NRP 32 study, the health-related and social effects of a fractured neck of the femur in elderly women and men in two cantons (Geneva and the Valais) were specifically

investigated. 253 patients with an average age of 82 who had been hospitalized in 1994 due to fracturing the neck of the femur were interviewed.⁵⁰

As women not only live longer than men, but also suffer more frequently from osteoporosis, it is not surprising that the proportion of women was very high at 85%. In over 70% of the cases, the fracture of the femur happened at home; in almost 60% of the cases as the consequence of a fall. The fracture of the femur caused or intensified both depressive symptoms and also anxiety in many of the affected patients. Significant increases in depressive symptoms and anxiety were recorded, particularly in the first three months after the fracture. In fact, depressive mood disorders were particularly pronounced in patients who did not recover their former mobility. The increase in depressive symptoms after fracturing the neck of the femur can be interpreted as a direct consequence of the fracture, whereas the thesis that depressive symptoms contribute to an increased risk of fracturing the neck of the femur must be refuted.

After three months, 42% of surviving patients had recovered their former mobility. After one year this increased to 49%. One-third was still bedridden or dependent on a wheelchair one year later. Of the patients originally living at home almost one-fifth had to move to a residential or nursing home within one year.

There are thus both chances of rehabilitation and large risks. Above all the first three months are decisive in terms of successful rehabilitation and restoration of mobility after fracturing the neck of the femur. Rehabilitation chances are, as expected, higher in younger patients. The lack of earlier fractures and hospitalizations is also associated with good chances of healing. At the same time, the rehabilitation chances of married patients is clearly higher than in unmarried people (which is probably linked with their care). In contrast, the sex, type of fracture as well as the subjective health indicators were not shown in this study to be definite predictors of rehabilitation chances after three months. Only later, after one year, were subjective health indicators and the status of mobility (recovered mobility versus further immobility) more strongly linked. In this case we can expect reciprocal connections, whereby bad healing chances intensify the feeling of bad health, and conversely, a positive health orientation enhances the healing chances. The same applies to ascertaining the relationship between rehabilitation chances and depressive symptoms: on the one hand, poor chances intensify depressive mood disorders, on the other hand depressive symptoms reduce the chances of rehabilitation. In each case it becomes clear that, besides medical factors psychological and social factors also determine the rehabilitative process after a fracture. This means that in decisions regarding treatment and operative interventions, the individual situation of the person concerned needs to be taken into account (age should be only one criterion among many others).

7 Main results and perspectives

⁵⁰ Cf. M.-P. Limagne, J.-P. Michel, et al. (1997) La fracture du col du fémur chez la personne âgée: De l'impact de la santé psychique sur la réhabilitation. Cahiers médico-sociaux, 41: 149-160; J.-P. Michel, M. Bruchez, C. Bayard, J. Morisod (1998) La fracture du col de fémur: Cause du rupture du parcours de vie et de desintegration contextuelle, NRP Project No. 4032-35680, final report, Geneva: HUG (mimeo).

Health-economic analyses show that the link between demographic ageing and rising health costs is weaker than often supposed. Gerontological studies also show that the equation 'old=sick' does not apply in this generalized form. A large majority of older and elderly people estimate their health as positive. Differences in sex and social position are striking in this respect. Older women suffer more frequently from protracted chronic illnesses than men, and elderly people with low incomes suffer more frequently from health complaints than well-off elderly people.

Hearing problems are frequent in very old age. However, only some elderly people with a hearing deficiency use a hearing aid, and a specific study shows that people react very differently to a hearing loss. Factors such as personality, emotionality and communication needs, help to determine how older people cope with hearing losses. In one-third of cases, investigations which are based only on audiological test results do not meet the needs of those concerned.

In the case of a fracture of the femur the chances of successful rehabilitation (reconstitution of mobility) are determined by psychological and social factors in addition to medical ones. This means that in the decision regarding treatment, the individual situation of older and elderly people needs to be taken into account. The chronological age, in contrast, should be weighted at the most as a subsidiary factor.

Health in old age is strongly determined by early and current health-related behaviour. Bad dietary habits, excess weight, a lack of physical activity, excessive consumption of alcohol and tobacco, influence the risk of illness in old age enormously. Up to seventy per cent of illnesses in old age could be avoided by a life without tobacco and more conscious eating habits. The fact that women live more often live healthier lives than men is an important cause of their longer life expectation.

In consideration of older and elderly people living in institutional households, it has been ascertained that between 10% to 14% of the 65-year-old and older population suffer from considerable functional disabilities. In absolute figures this represents, at present (1999), between 110,000 to 127,000 people. About half of these considerably disabled older and elderly people still lives at home.

In spite of the further development of basic health provision and community care, there is still an unmet need for care in more than a few elderly people. On the basis of a computer projection covering the whole of Switzerland, this applies to about 30,000 older people. The largest part of the unmet needs concerns domestic help.

F) Forms of treatment and nursing for elderly people

The enormous individual differences in ageing point to great possibilities of shaping human ageing. Ageing is not a process which happens as fate but a process that can, to a great extent, be influenced socially and individually (even taking the limitation of each human life into consideration). In old age there is considerable potential and scarcely tapped opportunities for action; either for the mobilization of resources and skills of people in the post-professional phase; or for the prophylaxis and prevention of negative ageing processes. The possibilities of

diverse, partly new forms of treatment and nursing were examined more closely within the framework of various NRP studies.

1. Care within the family for demented relatives

The majority of demented patients (sufferers from Alzheimer's and other forms of dementia) is cared for at home by relatives (mainly partners, daughters, daughters-in-law). Care of a demented patient requires an extremely intensive commitment and it can push the - frequently elderly - partners to their limits. The progressive course of dementia means that relatives continually have to adapt to changing situations. The demented person loses more and more of his/her intellectual abilities and autonomy in everyday life. This causes a change in the relationship between a nursing relative and a demented partner. The balance of the partnership, the give and the take, and former familiar character traits of the partner, the mother or the father, are masked by the illness. Symptoms of dementia, such as depression, aggression, anxiety, restlessness, confusion of night and day, hallucinations, etc. are a further strain on patients and relatives. This can restrict the social life of the relatives, especially if 24-hour care is necessary. Dementia is frequently an illness which not only affects the sick person but changes whole family systems.

Relatives frequently nurse a demented patient until the strain exceeds their strength. Thus, there is an increased risk of the carers also becoming ill. Emotional disorders with symptoms of anxiety, depression and exhaustion frequently occur in nursing relatives. It is therefore a central task to identify the problems which cause a strain on nursing relatives and look for solutions for their relief. This is also significant from a socio-political point of view, as only a supportive offer of help that is tailored to the requirements can prevent the premature committal of dementia patients to a home. Studies show that psycho-social measures (perhaps in the form of a memory clinic) can delay or even prevent placement in a home.

Within the framework of the NRP 32, two studies were carried out on the strains and needs of relatives of dementia patients living at home. In one study, organized by Denise Meier and Doris Ermini-Fünfschilling, interviews were carried out with relatives from Basel who were nursing an elderly dementia patient at home. The other study, headed by Cristina Molo-Bettelini, Nathalie Clerici and Anita Testa-Mader in the Ticino, consisted of an analogous analysis of relatives nursing dementia patients at home. Thus, the strains on nursing relatives of such patients was compared in two culturally different regions.⁵¹

Both studies interviewed relatives who were living together with a dementia patient and nursing him/her at home. In the Basel Study, a total of 72 relatives (40 women and 32 men) were interviewed between January 1995 and December 1996. In the Ticino, 80 relatives (62 women and 18 men) were interviewed between October 1994 and November 1996. In the Basel study, the length of the illness on average so far was 62 months and the estimated length of care was on average 34 months. In many cases, it was thus a question of year-long nursing

⁵¹ Denise Meier, Cristina Molo-Bettelini, Doris Ermini-Fünfschilling, Nathalie Clerici, Anita Testa-Mader (1998) Belastung und Bedürfnisse von Familienangehörigen, die demente Personen zuhause betreuen. Report from two regions (Basel and the Ticino), synthesis report, Basel/Mendrisio (mimeo.).

situations. A similar situation was found in the Ticino where patients had been nursed as long as 58 months on average. In Basel and the Ticino, the time free from nursing per week was about 17 hours i.e. the average carer had only 2 to 3 hours free each day. This reflects the intensity of caring for relatives.

The most difficult aspects of caring for dementia patients indicated in Basel were their intellectual and emotional dementia symptoms, as well as difficulties in everyday life. The relatives in the Ticino more frequently assessed their own psychological problems as difficult. In both studies, the constant fact of being tied to the patient and the narrow limits of personal freedom were frequently mentioned. Relatives often had to give up their own social life, their hobbies and pleasures, but also their personal autonomy.

Almost 40% of the relatives in Basel could not count on the help of their immediate family nor did they have any further family members who could support them. A further third indicated co-operation on the part of the family, but this rarely took place. Thus less than 30% of the Basel relatives could count on relatively frequent co-operation and support. Moreover, nearly 60% of the relatives from Basel recorded great difficulty in asking other people for help. Even professional services were only called upon by half of the relatives from Basel. The other relatives were either of the opinion that they would manage alone or they did not want any strange people in their house. Some relatives were not informed about the services on offer.

In the Ticino, due to different family situations, only 21% of the relatives interviewed did not count or hardly counted on the support of other family members. Nearly two-thirds (61%) could fairly often to often count on family co-operation (in contrast to only 28% of the Basel relatives). Correspondingly, more than three-quarters of the carers from the Ticino mentioned that there were no family conflicts with regard to the nursing of the dementia sufferer and in two-thirds of the cases (65%) they actually received help from relatives and friends (in contrast to 21% of the Basel relatives). The cultural differences between Italian- and German-speaking regions with regard to family structures and social networks are reflected in the family care of dementia patients. In the Ticino, professional services were more frequently called upon than in Basel. In the Ticino, the proportion of caring relatives showing difficulty in asking other people for help was lower than in Basel.

In Basel and the Ticino, around 30% of the relatives interviewed felt they were only under a slight strain due to the nursing situation. In both regions, 43% showed a light to moderate strain, a more than moderate to heavy strain was experienced by 26%. The strain on a nursing relative is determined, on the one hand, by the cognitive deficiencies of the patient and their negative effects on daily life. Particularly hard to cope with are the negative behavioural effects of the illness, such as diminished flexibility and reduced behavioural control, changed personal and social behaviour as well as the neglect of physical cleanliness. On the other hand, family conflicts, the lack of social support in the task of nursing as well as feelings of anxiety on the part of the carer, are also important.

In the Ticino, 44% of the nursing relatives mention serious health-related problems of their own. In Basel, as many as 70% of the relatives indicated health-related problems which additionally aggravated the care of the patients. Mentioned most frequently by the caring spouses – mostly very old themselves – were psychological or psychosomatic and

rheumatic/orthopaedic problems. Over 40% of the relatives interviewed in both studies showed anxiety symptoms, and 26% of the Basel relatives as well as 18% of those in the Ticino showed depressive symptoms. If the patient's symptoms were less pronounced, anxiety seemed to be the predominant symptom in the carer. In advanced stages of dementia - with marked dementia symptoms and an increased need of nursing on the part of the patient - the subjective strain and also the danger of a depressive condition on the part of the relative is higher.

Recommendations for the relief of and help to relatives caring for demented patients.

1. It is of central importance for the relatives to have supportive and counselling sessions with experts. Counselling sessions, in which the relatives are given information about the dementing illness and practical help in managing the effects of dementia symptoms, contribute to calming the fears of relatives already in the early stages of the illness. They also help to plan caring duties in an adequate manner. As modern diagnostic instruments enable doctors to make an ever earlier diagnosis of dementing illnesses, early information and counselling of the relatives become more and more important.
2. A wide range of services is necessary for the relief of the relatives. Among these are community services (Spitex service, day-care facilities), respite stays to relieve the carers (medically-indicated short stays in hospitals or homes, holidays for dementia patients), well-devised counselling and therapy facilities (memory training) and well-organized relatives' associations (as, for example, offered by the Alzheimer's association).
3. An increase in special places for dementia patients in day-care centres is necessary, particularly for the periodic relief of relatives under a great strain. There is still a shortage of such places in most regions of Switzerland.
4. Whoever regularly cares for an elderly, sick or disabled person at home should receive a carer's benefit (as is the case in the canton of Basel-City). Family care should not be disadvantaged in favour of institutional care.

Appropriate possibilities for support by trained staff as well as supportive and counselling sessions not only relieve the burden on the caring relative, but also lead to a reduction of costs in the health sector, due in part to the delay in an expensive home and hospital placement and in part to a reduction of long-term risks in the relatives themselves.

2. Community healthcare and different types of people in need of care

In recent years, community healthcare and social care facilities have been developed further in many regions of Switzerland. This simultaneously increases both the professional healthcare of elderly people – as a supplement to care within the family -and the autonomy of the older person living at home.⁵² As the model of community healthcare first made a breakthrough in Western Switzerland, the use of community services varies regionally. Thus, in Western

⁵² On the development and quality assurance of community healthcare, cf. Hermann-Michel Hagmann, Jean-Pierre Fragnière (1997) *Maintien à domicile. Le temps de l'affirmation*, Lausanne: Réalités Sociales; Spitex Verband Schweiz (1998) *Spitex in Trend – Trend für Spitex / Aide et soins à domicile – Profils d'avenir*, Berne: Huber.

Switzerland, considerably more elderly people make use of community forms of healthcare than in the German-speaking part. In addition, it is shown that elderly persons living alone more frequently call upon community services (an effect that also remains pronounced after age and disability grade have been controlled for). Moreover, elderly people with a higher level of education call upon community services almost twice as frequently as elderly people with a lower education (possibly because elderly people from lower social classes are less well informed about the facilities on offer and also have more difficulty asking for help). According to the Swiss Health Survey of 1992/93, people with a lower education, and elderly women, are the two groups where there is often an unmet need for care.

The federalistic structure of Switzerland as a whole and of the health sector in particular, however, lead to the development of differently structured forms of community healthcare in different regions. In many regions there are also structural incompatibilities and conflicts between the acute and community healthcare of the elderly. In many regions there is also a lack of an integrated, system-orientated information policy which would make it possible to cover all healthcare services of a community type in all its dynamic forms.

In view of the increasing demographic ageing and the rising cost of socio-medical care there is an increasing need for more precise information. Only in this way can the future distribution of limited resources be optimally planned. With this in mind, within the framework of an evaluation project headed by Dr Brigitte Santos-Eggimann, instruments for the recording of socio-medical services for elderly people were developed.⁵³ A socio-medical information system 'Balance of Care' was used and developed within the framework of the project. This system makes it possible to plan the use of regional cantonal resources for the community healthcare of the elderly. On the one hand, this information system integrates socio-demographic variables (e.g. age distribution and the frequency of elderly people in need of nursing care). On the other hand, based on the Swiss Health Survey and our own surveys, the healthcare needs of elderly people are taken into account by extrapolating profiles of those in need of care. The typology of different forms of the need for care were subsequently used as a basis for the evaluation of specific forms of care and expenditure. In a further step, a survey registered the care preferences of the people working professionally, on the one hand, and the elderly people, on the other.

The information system 'Balance of Care' allows for a sophisticated collection of data on the need for community care, even if the available information is still patchy. Political decisions on the distribution of resources in the community sector can then be clearly shown as the effects of different options become obvious. For example, the consequences of economizing on the quality of different types of care can be recorded. Conversely, it can be ascertained how community care develops if the starting point is seen as the preferences of the professionally active person or those of the affected elderly person. The distinction between the different types of care needed, moreover, avoids incorrect demographic projections and at the same time makes it possible to record the consequences of political decisions on different kinds of care needed. It can thus be ascertained what cost effects would be produced on community care by

⁵³ Cf. B. Santos-Eggimann, N. Chavaz, A. Clerc Berod, P. Laurence, F. Zobel (1999) *Modèle d'évaluation des politiques cantonales de prise en charge médico-sociale des personnes âgées chroniquement dépendantes et place du maintien à domicile*, Requête No. 4032-35702, Lausanne: Institute Universitaire de Médecine Sociale et Préventive (final report).

a different order of preferences, or what effects the new value judgements and concepts of care of future elderly people could have.

The new evaluation system was also tested in the five cantons Bern, Geneva, the Valais, Vaud and Zurich. These tests showed that such an information system offers a good basis for decision-making even if there are not enough data. Moreover, it became clear that the evaluation process according to the 'Balance of Care' system – if adjusted appropriately, can be made useful for variously structured health systems.⁵⁴

3. Electronic aids for elderly people

The rapid development of micro-electronic instruments and aids is opening up new possibilities for older and elderly people. Via the Internet older people can now get information about new medicines and forms of therapy, while also finding like-minded people who share their hobbies and interests.⁵⁵ Thanks to remote-controlled appliances, bedridden people can operate their telephone or television, and by means of electronic security devices, help can quickly be called in emergency situations (e.g. after a fall). Ideally, electronically installed accommodation allows an automatic opening and closing of doors or windows, a programmed switching on and off of cookers, etc.

Within the framework of a pilot study of the National Research Program (NRP 32) 'Ageing', the conditions under which electronic aids could be used in the service of disabled elderly people was examined. The research project was carried out in close interdisciplinary collaboration with the Sociological Institute of the University of Neuchâtel and the Swiss Foundation for Rehabilitation Technology (Fondation Suisse pour les Téléthèses) also in Neuchâtel.⁵⁶ In the course of this project, two different forms of electronic aids were used:

a) active technical aids: These are electronic aids requiring active and voluntary intervention on the part of the user (such as remote-controlled telephones, the remote control of light switches, windows, doors, television). In this way a disabled, bedridden or motor disabled person can at least partially control his/her environment. Active aids do not intrude but open up options. The initiative remains with the users and the instruments give them increased autonomy. They do, however, require intellectual ability on the part of the user. Active

⁵⁴ The computer-supported information system 'Balance of Care' may – with due regard to the copyright – be placed at the disposal of interested cantons. Contact person: Dr. B. Santos-Eggimann, Unité des services de santé de l'Institut universitaire de médecine sociale et préventive de Lausanne

⁵⁵ The Internet is being increasingly used by active senior citizens, and corresponding courses find a large echo. Since May 1998 there has been a special senior citizens web, which is supported by the EURAG, the Pro Senectute and Migros (<http://www.seniorweb.ch>).

⁵⁶ Project: François Hainard, Jean-Claude Gabus, Jean-Christophe Masson (1995) Téléthèses et maintien à domicile des personnes âgées. Experimental study of techniques placed at the service of dependent elderly people, final report, NRP Project 32 No. 4032-35633, Neuchâtel. For information on the Swiss Foundation for Electronic Aids in Neuchâtel, see the Internet: <http://www.fst.ch>.

technical aids can only be used to a limited extent in the case of people with cognitive disabilities.

b) passive technical aids: Such aids start working automatically and independently of the intervention of a user, for example when a door automatically opens or when an emergency signal is triggered in the case of a fall. Such aids are particularly suitable in cases where people are not able to act autonomously (e.g. due to unconsciousness after a fall or because of cognitive losses). Among passive aids are also electronic security systems which indicate the whereabouts of mentally confused residents of homes or which refuse unauthorized persons access to rooms, etc.

Experiences with active electronic aids

The acceptance of technical aids requires careful counselling and frequent explanation. Provided this is achieved, even breakdowns and technical problems in the initial stages do not lead to long-term problems. With the exception of the telephone alarm system – which is of course only used in emergencies – the electronic aids were used daily. After six to nine months they were an integral part of everyday life.

However, in contrast to the initial hypothesis of researchers, the elderly people equipped with electronic aids did not perceptibly change their daily life or daily activities. Their activities remained more or less the same before and after the installation of active electronic aids. It was merely shown that the adherence to former activities (such as telephoning, keeping house etc.) was facilitated. The introduction of active electronic aids thus leads neither to a new organization of daily life nor to new activities on the part of the elderly people but the aids are primarily used to continue life as before under easier conditions.

It also became clear that the use of electronic aids neither promotes the isolation of the elderly people (less contact, as more independent) nor increases social contact. Social consequences occurred insofar as the relatives and carers of the elderly people felt more secure (above all if a telephone alarm had been installed, but also if telephoning had been made easier). The elderly people themselves also felt safer, e.g. being able to call for help in an emergency. And this feeling of security relieved the burden on social relationships, especially on all the relatives who could not look in daily or lived further away. The feeling of greater security, meant moreover, that the autonomy of the elderly people also increased as they themselves could decide when they needed help.

Experiences with passive electronic aids

Disorientation is a central problem in residential and nursing homes, and with it the danger that residents will run away and get lost. Traditional strategies (locking up, accompanying and supervising residents) corroborate the picture of residential and nursing homes as 'total institutions'. Therefore, disorientated elderly people are not, or only unwillingly, admitted to some old people's homes. The aim of the pilot study was to use a technical system which selectively indicates the departure of each person who would rapidly lose his/her orientation outside the home. In the actual case, the technical installation was effected in small transmitters (e.g. in the form of a clip or tag), whose signals were received by aerials near the entrances of the home. Thanks to the electronic indicator, the identity of the person leaving

the house was known so that there was the possibility of fetching the disoriented person back or of accompanying them on their walk.

In the course of the experimental phase, it was shown that the affected residents left the home on average four to five times a day due to their confused condition (sometimes without realizing this themselves). The electronic system also detected nocturnal walks. For example, an elderly man was brought back to the home after trying to leave in his pyjamas at four a.m. one winter night.

The analysis showed that electronic alarm systems complied with the needs of various groups: the director of the nursing home was able to avoid sending confused people to more secure institutions, and nursing staff were under less stress as the danger of residents running away and getting lost (including the danger of possible accidents) largely ceased. Also the constant checking and inspecting – perceived by the affected persons as interference – stopped. The residents not suffering from disorientation could leave the house freely as the problem of the disorientated persons had been solved without the other residents being in any way restricted in their freedom of movement (no locked doors, no visible control cameras, etc.). The fundamental ethical question linked with this system of electronic supervision of confused or demented elderly people with regard to a restriction of personal dignity can be answered satisfactorily if the advantages and disadvantages of the system were already discussed, with reference to each individual case with nursing staff and relatives before the installation. In the case of passive systems, as with other electronic aids, the early and open co-operation of all involved is an important condition for success.

Generally it can be said, and this was also shown by the pilot study in all spheres (active and passive) that the introduction of innovative electronic aids for elderly people requires careful social counselling. The early involvement of the environment (relatives, nursing staff, neighbours) is a central requirement for success. The same applies to the information and explanations given to the affected elderly person. Early information is all the more important as many elderly people do not know how to present their needs or problems to others.

Often the behaviour of elderly people does not change markedly with the use of active electronic aids. However, the aids allow the disabled person to increase his/her autonomy and safety (e.g. alarming relatives), and accommodate the needs of today's elderly people – for whom autonomy and safety represent the highest values.⁵⁷

Passive electronic aids proved particularly valuable for non-specialized old people's homes as they make it possible to admit a mixture of patients. Thanks to suitable aids, both the private sphere of residents can be better safeguarded (for example, against unauthorized entry) and the safety of confused people better guaranteed. Fewer conflicts occur and the burden on staff (unnecessary checks, anxiety) is reduced (which also benefits the elderly residents). On the

⁵⁷ The possibilities and advantages of electronic aids for elderly people are introduced and illustrated by a special NRP32 video film: A. Jolliet (1997) *Vieillir heureux chez soi*. Techniques and domestic aids in the service of elderly people, Geneva: Univideo Genève (German version: *Glückliches Altern zu Hause*, Italian version: *Invecchiare felici in casa propria*) (video duration 26 minutes). Information under: <http://www.unige.ch/univideo>.

basis of the pilot study and experience gained, the electronic security system for residential and nursing homes of the Neuchâtel 'Fondation Suisse pour les Téléthèses' has been further developed and marketed under the brand name of 'Quo Vadis'.

4. Cognitive psychotherapy and depression in old age

In connection with the depressive symptoms in older and elderly people, we must ascertain to what extent specific psychotherapeutic interventions represent a solution. There are still many unanswered questions regarding the application of cognitive psychotherapies for depressive elderly people. This particularly applies when adjusting the therapy to age-related changes in cognitive and sensory processes. Nor are the problems of daily life with which elderly people are confronted the same as in young people. For this reason, an experimental intervention study was carried out within the framework of the NRP 32. In this study, carried out in Geneva by Lucio Bizzini and Christine Favre, elderly depressed people aged between 60 and 80 without demential symptoms were submitted to a cognitive psychotherapy. The intervention model developed in the course of this study integrated psychiatric, neuro-psychological, and psycho-gerontological ideas to meet the situation of elderly people.⁵⁸ The intervention was effected at three levels:

- a) individual cognitive preliminary therapy to prepare the elderly patients for psychotherapy (and in order to familiarize people who had never been submitted to psychotherapeutic treatment before with the 'rules of the game'). An exact preliminary clarification of sensory and cognitive limitations is important in this phase, e.g. to avoid communication problems due to hearing deficiencies.
- b) cognitive psychotherapy, in which depressive patients are informed in individual sessions over a period of 4-6 months of the reciprocal relationship between thoughts and feelings with the aim of neutralizing cognitive distortions.
- c) cognitive group therapy with strategies of decentring. With decentring strategies the closed thought system of depressive people is breached; either through the exposure of alternative viewpoints and problem solutions; or by bringing to light and questioning basic assumptions about themselves.

The corresponding interventions - especially cognitive therapies with decentring strategies – proved successful in the case of depressed elderly people, and in at least half of the people concerned there was clear progress with regard to their decentring ability.⁵⁹ However, with this group of people, cognitive psychotherapies on the whole take longer than with younger people; either because depressive symptoms have a long-lasting biographical background; or because depressive symptoms are intensified by chronic illness and disability. Nevertheless,

⁵⁸ Cf. L. Bizzini, C. Favre (1998a) *Psychothérapie cognitive de groupe de dépression dans l'âge: indices et mécanismes psychologiques de changement*, final report, Geneva: Hôpitaux Universitaire de Genève (mimeo); L. Bizzini, C. Favre (1998b) *Psychothérapie cognitive et dépression chez la personne âgée*, in: B. Samuel-Lajeunesse, C. Mirabel-Sarron, L. Vera, F. Mehran (eds.) *Manuel de thérapies comportementales et cognitives*, Paris: Dunod.

⁵⁹ The exact procedure in these interventions is presented in 1999 in a small handbook 'Thérapie cognitive de group enrichie de stratégies de décentration (CTDS) pour des personnes âgées souffrant de dépression'

age-related crises and fragility in many elderly people contribute to an acute need for psychotherapeutic treatment.

5 Preventive geriatric home visits

In view of the rising number of very old people, intensified efforts to prevent disability in old age are of great socio- and health-political significance. Avoiding the need for care in old age requires a new understanding of prevention, which is aimed less at the avoidance of early death than at the avoidance of disabilities. As disabilities in old age not only depend on medical risk factors but also on psychological, social and environmentally-related aspects, non-medical risk factors need to be detected and dealt with. In view of the variety of medical, social, psychological and contextual risk factors of disabilities in old age, a multi-dimensional geriatric assessment is necessary, which comprises inter alia close interdisciplinary co-operation.⁶⁰

In order to research the effectiveness of a multi-dimensional geriatric assessment and preventive home visits, the EIGER Project (Research into innovative home visits) was carried out in the region of Berne within the framework of the National Research Program (NRP 32) 'Ageing'. Women and men aged over 75 who were living at home were asked three questions: Firstly, the researchers wanted to check whether the procedure of preventive home visits – as tested in the USA – is also effective in Switzerland with its different health system. Secondly, they wanted to test whether all or only one subgroup of older people would profit from such an intervention. And thirdly, the procedure of the intervention and its influence on effectiveness was to be more closely examined.

Following an initial evaluation of 791 people, the participants in the study were randomly divided into two groups according to risk factors: 264 persons were placed in the intervention group which received regular preventive home visits from family health nurses over the next two years. The remaining 527 persons were allocated to the control group without home visits. In this way, it was possible to identify the effect and efficiency of preventive home visits.

In the first year of the project, family health nurses were specifically trained in the execution of preventive home visits, the data collection instruments being summarized in a handbook.⁶¹ At the beginning and then at yearly intervals, the nurses carried out a multi-dimensional geriatric assessment with each person in the intervention group. Assessment comprised a structured interview, physical and functional examinations (hearing, sight, memory, emotion, walking/balance, state of nutrition), an evaluation of the housing situation and use of medication as well as a simple laboratory test. On the basis of this survey the family health nurses noted down the problems they had observed and which were to be dealt with, and they compiled a list of recommendations in co-operation with the project geriatrics specialist.

⁶⁰ Cf. A.E. Stuck (1997) State of the Art: Multidimensionales geriatrisches Assessment im Akutspital und in der ambulanten Praxis, Schweiz. Med. Wochenschrift, 127: 1781-1788

⁶¹ Cf. A.E. Stuck, H. Schmocker, A. Kesselring, A. Lüdin, H. Flückiger (eds.) (1995) Präventive Hausbesuche bei älteren Menschen. Bases, procedures and experiences of the EIGER Project. First version, Berne: NRP 32. There will be a revised handbook in 1999.

Subsequently, they visited the elderly people at three-monthly intervals, giving recommendations and trying to help in implementing the recommendations. Moreover, they gave general health guidance and showed the people they visited how they could deal with their problems themselves or discuss them with their family doctor.

Results of the intervention study

The study showed two central findings, summarized below:

Firstly, the preventive effect of such home visits depends on the form and procedure on the part of the family health nurse. A central factor in the preventive effect of community home visits is a good preliminary clarification of possible problem situations and health risks on the first visit. This result points to the central significance of a professionally executed multi-dimensional geriatric assessment. Without good data collection instruments which can be easily applied in practice, preventive home visits do not prove to be very effective. Moreover, it became clear that the effectiveness of preventive home visits depends on the intervention strategy chosen by the family health nurses. Those who succeeded in prevention gave far more recommendations and intervened more frequently (as the analysis of the visit protocol showed). It was shown that good contact and great understanding for the elderly person did not suffice, and that the satisfaction of the elderly person with the home visits alone is not a sufficient criterion for their effectiveness. An effectively preventive procedure is only possible on the basis of exact quality criteria. Four central quality criteria are above all required for an effective intervention:

1. A comprehensive clarification and recognition not only of the individual problems and risk factors, but also of the social resources of the elderly person.
2. The development of an adequate individual plan of recommendations
3. The elderly people must be professionally supported in the application of the recommendations.
4. The professional dispensation of health guidance is necessary.

Secondly, preventive home visits are only meaningful in the case of elderly people without previous high health-related risks. Preventive visits are mostly too late for persons with very high health risks at the beginning of the intervention. This fact was shown clearly in the EIGER Project, where measurable preventive effects only occurred in the 'low risk' group. In the 'high risk' group, (i.e. persons who already showed a high risk of disability in the initial clarification), no significant preventive effects were ascertained after two years. Thus preventive home visits can only be effective if they are carried out in good time, i.e. before elderly people suffer from visible ailments and disabilities. In the case of elderly people living at home with a high risk of disability, therapy and rehabilitation, rather than prevention, are in the foreground.

Preventive home visiting programs should therefore be primarily directed at 'healthy elderly people' (as a supplement to a doctor's care). In the case of the over 75 year olds from the 'low risk' group living at home, professionally and competently executed home visits led to less dependence in daily life. In particular – due to appropriate physical training – there were fewer balance problems. At the same time, more flu vaccinations were carried out and a

competent intervention increased the use of desirable medication (e.g. blood pressure tablets, painkillers) and reduced the consumption of less desirable medication e.g. Benzodiazepine, anti-rheumatism remedies). After three years the number of nursing home committals was also very significantly lower in the 'low risk' group than in the control group. The improvement in autonomy and the walking/balance functions shows that nursing home committals were reduced by a prevention of disabilities and not just because elderly people were cared for longer at home.

The project led to an increase in costs in the short term, caused on the one hand by the costs of the home visits themselves and the costs of additional family doctor consultations. Longer term, from the third year onwards, however, there were clear savings due to the reduction of nursing home days. Insofar as the nursing home committals of elderly people could be reduced by effective preventive home visits, there were longer-term savings even if the additional costs of the preventive home visits were taken into account. Above all, after three years professionally conducted preventive home visits show a positive balance in low risk persons.

Preventive home visits can be successful, however, only if there is a qualified multi-dimensional geriatric assessment and competent home visits with clear criteria. Moreover, such preventive measures must be carried out at an early stage.

Possible consequences for practice

1. How could preventive home visits be integrated into the Swiss health system?

Various scenarios are conceivable. One possibility is the integration in selected doctors' practices of mobile units, or integration into a Spitex organization. In any case, home visits require close co-operation with the family doctor as many recommendations belong to the family doctor's sphere of responsibility (e.g. vaccinations, medication).

2. Which professional group could carry out preventive home visits?

In the EIGER Project there were specially trained nurses, working in close co-operation with geriatric specialists. The execution of the visits requires interdisciplinary knowledge together with diagnostic skills. However, certain aspects of home visits could be taken over by other qualified people. For example, the initial multi-dimensional assessment could be partly carried out more cheaply by trained interviewers. Certain aspects of the survey could also be taken over by the family doctor.

3. How could such home visits be financed?

In view of rising costs in the health sector, this is a key question. In the first phase, additional costs arise (and the home visits themselves cost between 460 and 530 Francs per person and year). Savings are only made in the second phase – thanks to fewer nursing home committals. Clarifications regarding funding are in progress, and the possibilities which exist for adopting preventive home visits as a service within the framework of the new health insurance law are being examined. Precise quality demands would have to be made on the execution of preventive home visits (as only professionally conducted home visits are effective from a preventive viewpoint).

4. How can the training of specialists be ensured?

The analysis of the project shows that the requirements are not covered by the present training of family health nurses. An exact profile of the qualifications for a family health nurse is therefore in preparation. There are also additional geriatric requirements for doctors. From 1999 the findings of the EIGER project will be integrated in the national further training course for geriatrics.

5. How can the quality of preventive home visits be guaranteed?

On the one hand, on-going documentation and evaluation of preventive home visits is necessary for the early identification of possible deficiencies. On the other hand, supervision by trained experts (geriatric specialists, family doctors, family health nurses) is required.

6. How can elderly people be motivated to take part in preventive home visits?

Ethically accountable health guidance is only possible with voluntary participants. For elderly people to take part in such projects they must be informed about the possibilities of preventing disabilities. Only too often disabilities and the need for nursing care in old age are wrongly regarded as inevitable fate. Initial contact could be made via the family doctor, a Spitex organization, the local council, a health insurance fund, etc.

6 Main results and conclusions

Family care continues to be a central, unrenouncable element of care of the elderly. It is especially demented elderly people that are mostly cared for by relatives. Caring relatives of demented patients are often subject to great strain, either through the nursing duties, or through personality changes on the part of the demented relative. It is therefore all the more important to have adequate support and relief, either by means of qualified counselling by a specialist or through the range of possibilities for the relief of caring relatives.

Community nursing and care of elderly people have become an important branch of the health sector. In many regions, however, there is a lack of an integrated, system-oriented information policy that could include community nursing services in their dynamic interplay. In view of increasing demographic ageing and the rising costs of socio-medical care, however, it is more and more important to have exact information. Even with gaps in the data, the information system developed within the framework of the NRP 32, 'Balance of Care' offers a sophisticated picture of the need for community healthcare. Thus political decisions regarding the distribution of resources in the community sphere can be made explicit.

The development of new micro-electronic instruments can also be of use to elderly disabled people. A pilot study, in which active and passive electronic aids were used with disabled elderly people, demonstrated clearly that the latest technology can be made useful for the oldest generation, provided technological innovations are combined with careful social counselling.

The special characteristics of elderly people (such as sensory and cognitive limitations, biographical background) need to be taken into account in the application of cognitive psychotherapies in old age depression. If this condition is met, cognitive therapies with decentring strategies are particularly successful with elderly depressed people.

It is generally shown that disabilities in old age can be combated preventively. Preventive home visits prove to be a particularly effective strategy for the prevention of disabilities in old age, however, only under the conditions of a professionally executed multi-dimensional geriatric assessment and professionally organized home visits. Moreover, preventive home visits are especially effective if they are implemented early.

Proposals for further gerontological research

The NRP 32 has strengthened gerontological research in Switzerland. In certain spheres, the NRP 32 has also contributed to the continuity of gerontological research. Some projects will be continued following the completion of the NRP 32. With the 'Centre Interfacultaire de G rontologie' in Geneva there is a qualified gerontological research centre and – stimulated by the NRP 32 in co-operation with specialists from the sphere of gerontology – a centre for gerontology was founded at the University of Zurich in 1998. In collaboration with the Pro Senectute, since 1998 university members have organized an annual gerontological summer academy, and the Geneva International Network on Ageing (GINA) is an internationally orientated network on ageing matters. Specialized continuity and co-ordination is also effected by the Swiss Society for Gerontology, which has worked closely with the NRP 32 from the outset.

In October 1998, in addition, a university institute 'Ageing and Generations' (INAG)⁶² was founded at the initiative of Prof. H.-M Hagmann, President of the Experts' Group NRP 32. This institute is to reinforce on-going multilingual gerontological discussion at a university level. The INAG – officially affiliated to the Kurt Bosch Institute in Sion – is committed to the following three aims:

- a) the promotion of interdisciplinary exchanges and discussion in the sphere of ageing and generations
- b) the promotion of pan-Swiss and multilingual perspectives and co-operation in applied gerontological research and learning
- c) the promotion of the link between basic research, applied research and professional work in the sphere of ageing.

Further research on ageing is necessary given the social and economic situation, as well as the personal and health-related condition of older people as a cohort, is constantly changing. The analysis of cohort effects, and the supplementation of cross-sectional studies with longitudinal studies are of high priority, especially in gerontology. Nevertheless, intervention and pilot studies in older people also have a high priority in gerontology, as ageing can be shaped to a large extent.

Although important work has been done within the framework of the NRP 32, there are still significant gaps. For example, we lack studies on the subject of violence in old age or on violence towards older people, studies on religion and the religious experience of older people, studies on intercultural differences in old age as well as analyses of long-term nursing situations. In view of current discussions on retirement, studies on new forms of retirement

⁶² More detailed information on the university institute 'Ageing and Generations' may be found under: <http://www.ikb.vsnet.ch/INAG>

would be valuable. Rising life expectation, moreover, leads to the fact that aspects of very old age (the situation of the very old, shaping of the final phase of life) are becoming increasingly important. However, a central point in all studies is a differentiated approach which comprises the enormous social and personal differences between people of the same age.

Final thoughts

The economic and social situation, and the personal state of older people in Switzerland have improved dramatically in recent decades. The further development of old age provision and a great generation change are both responsible for this. Not only do women and men in Switzerland live longer, they often benefit from many healthy years of life, too. We can expect a substantial improvement in the quality of life for many people in the future. At the same time, however, social and biographical differences also lead to a marked imbalance in the quality of life of older people. As a result, in addition to the preservation of solidarity between the generations, the strengthening of solidarity among pensioners is a central task for the future.

The 'new age' also has to be mastered from a socio-political viewpoint. The last few years have shown contradictory developments: on the one hand, there has been a socio-cultural rejuvenation of the older population, which is frequently able to use the post-professional phase as a phase of late freedom. On the other hand, economic developments have led to an early elimination of people from the labour market, whereby women and men are declared 'old' earlier and earlier. It is clear that the development towards the reduction of working life cannot be continued in future because of demographic ageing. New, flexible forms of retirement which enable older women and men to continue to work, are increasingly necessary. At the same time, the potential and skills of older people must be filled with new meaning. This includes a positive resource-orientated view of old age. Many of the current discussions, for example in pensioners groups, are steps in this direction, but the adjustment of our social structures to the longevity of today is a process that will occupy us for decades to come.

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Annex II

Expert group organising the research program

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Dr Peter Binswanger, Lugano (long time president of the Pro Senectute, died in 1996)

Dr Jean-Pierre Rageth, Département de l'action sociale et de la santé, Genève

François Huber, Bundesamt für Sozialversicherung, Bern

Prof. Hans Schmid, representing the Swiss National Science Foundation,

Dr Charles Kleiber, Service des hospices cantonaux, Lausanne; from 1997, Directeur du conseil national de la recherche et de la science

Prof. Helmut Schneider, Wirtschaftswissenschaftliches Institut der Universität Zürich

Mimi Lepori Bonetti, Consulenza sociale e non profit CONSONO, Lugano

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