What is successful ageing and who should define it?

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BMJ 2005;331;1548-1551
doi:10.1136/bmj.331.7531.1548

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Funding: None.

Competing interests: None declared.

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(Accepted 14 October 2005)

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A definition of successful ageing needs to include elements that matter to elderly people

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BMJ 2005;331:1548–51

The substantial increases in life expectancy at birth achieved over the previous century, combined with medical advances, escalating health and social care costs, and higher expectations for older age, have led to international interest in how to promote a healthier old age and how to age "successfully." Changing patterns of illness in old age, with morbidity being compressed into fewer years and effective interventions to reduce disability and health risks in later life, make the goal of ageing successfully more realistic. Debate continues about whether disability has been postponed,[1] although the Berlin ageing study[2] and the US MacArthur study of ageing[3] showed that greater longevity has resulted in fewer, not more, years of disability.

A forward looking policy for older age would be a programme to promote successful ageing from middle age onwards, rather than simply aiming to support elderly people with chronic conditions. But what is successful ageing? And who should define it?

Methods

We discuss existing models of the constituents of successful ageing from the social, psychological, and medical sciences. We undertook a systematic literature review, searching PubMed, PsycINFO, and SocioFile (all years) for "successful ageing." We included 170 papers presenting reviews or overviews of the topic, data from cross sectional and longitudinal surveys, and qualitative studies (full list available on request, but the main ones are listed here[2–22]). We also included lay definitions elicited from our own recent survey of successful ageing.

What is successful ageing?

The main themes emerging from the theoretical literature reflected psychosocial or biomedical approaches, or combinations of these (see box). There was some overlap with lay views; although the latter were more comprehensive and multidimensional.

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Decline and fall? Goya's *Les Vieilles* ("Time of the Old Women")

Biomedical theories

Biomedical theories define successful ageing largely in terms of the optimisation of life expectancy while minimising physical and mental deterioration and disability. They focus on: the absence of chronic disease and of risk

factors for disease; good health; and high levels of independent physical functioning, performance, mobility, and cognitive functioning. The MacArthur studies of successful ageing, based on a three site longitudinal study of elderly US adults living in the community in 1988,[3 8] are the most well known and widely published biomedical studies of successful ageing.

The division of people into "diseased" and "normal" fails to recognise the large heterogeneity within these groups. To overcome this, Rowe and Kahn distinguished between "usual ageing" (normal decline in physical, social, and cognitive functioning with age, heightened by extrinsic factors) and "successful ageing" in which functional loss is minimised (little or no age related decrement in physiological and cognitive functioning, with extrinsic factors playing a neutral or positive role).[3] They confirmed the three components of successful ageing as absence or avoidance of disease and risk factors for disease, maintenance of physical and cognitive functioning, and active engagement with life (including maintenance of autonomy and social support). Some investigators have broadened the model to include more psychosocial elements,[4] although attempts to build interdisciplinary models are still rare.

Rowe and Kahn's model is the most widely used approach, but it fails to address the implications of the fact that a disease-free older age is unrealistic for most people. Moreover, it has been reported that, although half of elderly people can be categorised as having aged successfully in terms of their own criteria, fewer than a fifth can be so categorised with this traditional medical model.[9]

Psychosocial approaches

While the biomedical model emphasises absence of disease and the maintenance of physical and mental functioning as the keys to ageing successfully, socio-psychological models emphasise life satisfaction, social participation and functioning, and psychological resources, including personal growth.

Satisfaction with one's past and present life has been the most commonly proposed definition of successful ageing, and is also the most commonly investigated.[15] Its components include zest, resolution and fortitude, happiness, relationships between desired and achieved goals, self concept, morale, mood, and overall wellbeing. Continued social functioning is another commonly proposed domain of successful ageing. It encompasses high levels of ability in social role functioning, positive interactions or relationships with others, social integration, and reciprocal participation in society.[16]

Suggested psychological resources for successful ageing include a positive outlook and self worth, self efficacy or sense of control over life, autonomy and independence, and effective coping and adaptive strategies in the face of changing circumstances. For example, when some activities are curtailed (say, because of ill health) strategies need to be activated to find new activities and to maximise one's reserves.[17] Successful ageing is seen as a dynamic process, as the outcome of one's development over the life course,[18] and as the ability to grow and learn by using past experiences to cope with present circumstances while maintaining a realistic sense of self.

Main constituents of successful ageing

Theoretical definitions

- Life expectancy
- Life satisfaction and wellbeing (includes happiness and contentment)
- Mental and psychological health, cognitive function
- Personal growth, learning new things
- Physical health and functioning, independent functioning
- Psychological characteristics and resources, including perceived autonomy, control, independence, adaptability, coping, self esteem, positive outlook, goals, sense of self
- Social, community, leisure activities, integration and participation
- Social networks, support, participation, activity

Additional lay definitions

- Accomplishments
- Enjoyment of diet
- Financial security
- Neighbourhood
- Physical appearance
- Productivity and contribution to life
- Sense of humour
- Sense of purpose
- Spirituality

Lay views

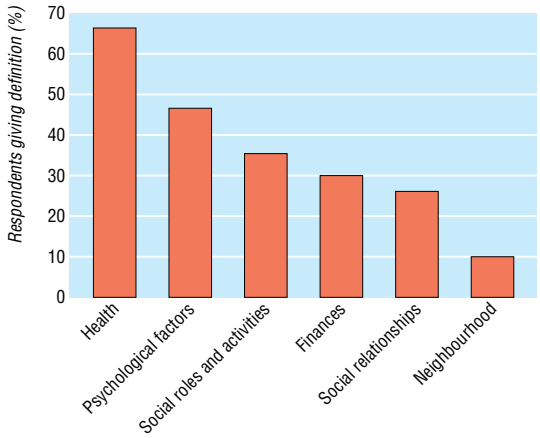
There are a few investigations into older people's views of what is successful ageing.[19] Their definitions include mental, psychological, physical, and social health; functioning and resources; life satisfaction; having a sense of purpose; financial security; learning new things; accomplishments; physical appearance; productivity; contribution to life; sense of humour; and spirituality. The box lists several lay definitions that are not captured adequately by theoretical models.

We also conducted a national, random population survey of perceptions of successful ageing among 854 people aged 50 or more, living at home in Britain; this was part of an Office for National Statistics omnibus survey (analyses ongoing). Of these people, 75% (631) rated themselves as ageing successfully "Very well" or "Well" (as opposed to "Alright," "Not well" or "Not very well"). The most commonly mentioned definition of successful ageing, in response to open ended questioning, was having good health and functioning, but these were rarely mentioned in isolation, and most people mentioned more than one definition (see figure). Typical comments were:

"[Successful ageing is to] go out a lot and enjoy life, take it day by day, and enjoy what you can … Have good health—that's more important than anything else. Keep active—while your legs are moving get out on them."

"[It's] good health. Well, if you're fit and able to do more … active … you … contribute to society and get actively involved."

"It's your outlook on life to start with. I think I have been an active person. It's your whole outlook. Do you make an effort to keep fit? I don't think about getting old. I just don't feel old and act accordingly."



Most common definitions of successful ageing given by 854 people aged ≥50 in Britain

Less commonly, successful ageing was defined in terms of social capital, as retiring in a safe neighbourhood, and with good community facilities.

Policy implications

Several policy implications become evident from a broader interpretation of the concept of successful ageing. Biomedical research has developed to include the investigation of biological pathways to unsuccessful ageing (impaired mental and physical functioning, including immunological and genetic markers), although the current policy focus is on disease prevention and health promotion for achieving successful ageing. Most behavioural actions for successful ageing continue to promote health related behaviours and engagement in cognitively stimulating activities. Indeed, on the basis of the Landmark Harvard study of adult development, Vaillant argued that successful ageing is less dependent upon genetic predisposition than previously thought.[4]

If high social functioning, for example, is accepted as part of ageing successfully, the implication is that people need encouragement to build up their social activities and networks from a young age, and the provision of enabling community facilities is needed. This is given impetus by research indicating that many domains of successful ageing are inter-related, and that having multiple social activities and relationships is associated with life satisfaction and better health and functioning, autonomy, and survival.[4 20]

Psychosocial models have also culminated in the positive psychology movement, with its proponents of the benefits of learnt optimism.[23] It has been postulated that people can learn to see "a bottle half full" instead of "a bottle half empty" and that having a happy outlook is a skill that can be cultivated. But, irrespective of the likelihood of genetic influences, getting people to "cheer up" is not always easy in real life.

With greater recognition that older people are not a homogeneous group, health professionals need more balanced, interdisciplinary perspectives of older age. People's low expectations of ageing are associated with their placing less importance on seeking health care.[21] Clinicians need to be aware of their patients' values and expectations of ageing in order to enhance mutual understanding of their health goals and priorities,[19] and to consider interventions that will optimise their chances of "ageing successfully" in their terms. However, interventions need to target potentially vulnerable groups early on, as several longitudinal datasets have shown that variables measured in middle age predict outcomes in old age.[4] Consistent with this are longitudinal data showing that adaptation to old age is related to experiences of stressful events, and is also associated with social class.[24]

Conclusions

Most concepts of successful ageing are used uncritically and tend to reflect the academic discipline of the investigator. Many authors have also confused constituents with precursors. While the biomedical models emphasised absence of disease and good physical and mental functioning as successful ageing, sociopsychological models emphasised life satisfaction, social functioning and participation, or psychological resources. Lay views of successful ageing are important for testing the validity of existing models and measures, if they are to have any relevance to the population they are applied to. There is little point in developing policy goals if elderly people do not regard them as relevant.

Most health care provided in the developed world goes to those aged 65 years or above. The medical model is so dominant that few health professionals are aware of psychosocial ageing. The result is a focus on the burden of old age, the decline and failure of the body. This negative perspective inevitably dominates consultations between doctors and patients. However, there is ample evidence that many elderly people regard themselves as happy and well, even in the presence of disease or disability. Doctors should be aware that many elderly people consider themselves to have aged successfully, whereas classifications based on traditional medical models do not. This review led us to a paper by Callahan et al,[22] who suggested that we need to examine our assumptions and adopt humility of perspective. Health professionals need to respect the values and attitudes of each elderly person who asks for help, rather than imposing our medical model on to their lives.

In conclusion, the achievement of successful ageing in terms of all the criteria presented here is unrealistic for most people. But successful ageing needs to be viewed, not only multidimensionally, but as an ideal state to be aimed for, and the concept itself should be placed on a continuum of achievement rather than subject to simplistic normative assessments of success or failure. Given the enormous body of ongoing research on the topic, it would be unhelpful to abandon the term altogether; the adoption of a broader perspective will have relevance for elderly people themselves.

We thank Sandra Short, Ian O'Sullivan and the Office for National Statistics (ONS) staff who carried out the original Omnibus Survey data analysis and collection. They hold no responsibility for the further analysis and interpretation of them. Material from the ONS Omnibus Survey, made available through ONS, has been used with the permission of the controller of the Stationery Office. The dataset will be held on the data archive at the University of Essex.

Contributors: AB undertook the systematic review and analyses and is guarantor for the study. AB and PD wrote this article collaboratively.

Funding: None.

Competing interests: None declared.

Ethical approval: Not required.

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(Accepted 9 October 2005)

Slow tracking for BMJ papers

Christopher Martyn

An editor argues against the current enthusiasm for fast tracking pages

Because the author was so slow in delivering his manuscript, it had to be fast tracked to get into this issue

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BMJ 2005;331:1551–2

It seems that it all started with the *Lancet*.[1] In 1997 it offered to publish selected manuscripts within four weeks of submission. They claimed that their motive was to get important data into the public health arena as quickly as possible, citing worrying (worrying!) instances that they and other journals had experienced of "delays in the publication of important data with major public-health messages." Each week's delay, they asserted, is "another week during which the research findings can leak out, perhaps in distorted form, via the mass media. Without the full paper, those health-care workers who advise the public are not privy to the caveats and interpretations made by the authors of the study."

Convinced? Well, *JAMA* was, and a year or two later it offered much the same thing.[2] It dubbed the process EXPRESS (Expedited Peer Review and Editorial System for Science) presumably to give the impression that it was *JAMA*'s idea in the first place. Any number of other journals tagged along, and authors can now request fast track from the *International Journal of Social Psychiatry*, *Neuropsychological Rehabilitation*, the *European Journal of Developmental Psychology*, the *Journal of Molecular Endocrinology*, and the *Journal of Occupational and Environmental Medicine*, to name but a few. There was even a time when the *Quarterly Journal of Medicine* offered to fast track papers.

The *BMJ* has always been doubtful. As an editorial in 1999 pointed out: "It usually takes years to do a study and then years for change to happen: why rush around to reduce the time to publication by months?"[3] But, in the end, we came around, signalling our half heartedness with the obscure—we reckoned ironic—icon of a bike with oval wheels. At least we were honest about the reasons: "We hope it will attract researchers with high quality studies to submit them to the *BMJ*, and we hope it will serve readers by helping us to attract better papers."

Evolutionary biologists will understand what's going on here.[4] In a complex and changing system, a species needs to continue to develop just to maintain its fitness relative to other species. If a mutation allows antelopes to run faster, cheetahs must evolve or starve. But it's not only in arms races between predators and prey that this principle operates. It also happens when there is competition for limited resources. Trees in a forest compete for sunlight. If one tree grows taller, it captures sunlight that would otherwise have reached neighbouring trees. They are then forced to grow taller to avoid being overshadowed. Overall, the effect of competition is that trees become taller. But note the downside: there's still the same amount of sunlight. It's just that trees have to work harder to get their share.

It's the same with journals. To prosper they must attract the best papers—a limited resource. If one journal makes itself more attractive to authors by speeding up its processes, others are constrained to follow. But the process engenders no increase in the number of good papers. Who benefits? Certainly not the journals—they've had to expend more editorial energy on publishing the same number of papers. The authors? Probably not, because the best papers were usually published fairly promptly anyway. Readers? Again, and for the same reason, probably not. It's hard