



Literature Review

Salutogenesis and the Promotion of Positive Mental Health in Older People

EU Thematic conference "Mental Health and Well-being in Older People - Making it Happen"

19th- 20th April 2010, Madrid

Organised by the European Commission Directorate-General for Health and Consumers and the Spanish Ministry of Health and Social Affairs with support of the Spanish

Presidency of the European Union



position of the European Commission.
Neither the European Commission nor any person acting on its behalf is responsible for any use that might be made of the following information.
© Funda and Communities 2000
© European Communities, 2009 Reproduction is authorised provided the source is acknowledged.

Literature Review

Salutogenesis and the Promotion of Positive Mental Health in Older People

What does the salutogenic approach offer for mental health promotion and positive mental health in older people?

Jenny Billings and Ferhana Hashem

1 Introduction

Creating positive health, or *salutogenesis*, and developing ways to use this concept in health care has grown steadily over the past two decade, as can be seen from discussions about how health is maintained and how health care is delivered. A *salutogenic* approach provides a particular perspective to the way health is viewed, which is centred on the discovery and use of personal resources, either inside a person or in the environment, that maintain a healthy status. This is opposed to the traditional view of health care, which focuses on the search for the causes of disease. In particular, theories about salutogenesis aim to explain why some people fall ill under stressful conditions and others do not.

The purpose of this briefing paper is to give an initial overview of the potential and usefulness of the salutogenic approach in promoting mental health in older people. Following a brief synopsis of salutogenesis and its associated concepts, the paper will provide a picture of how it has been used to improve our understanding of older people's health and welfare, and give an indication of how a salutogenic approach has been used in practice to promote mental health. With a focus on professionals, a further section will describe how salutogenic frameworks have been used to improve professional care.

This review is based on a literature search performed in March 2010. A search was made on PubMed and the University of Kent Academic Search. Complete. The latter contains full text and abstracts for over 9,000 journals from disciplines such as health, social sciences, psychology, humanities, general science, education and multiculture. In addition, it cross references with ScienceDirect, Ingenta, Medline and Cinahl. Identified reports were included in this review based on relevance for European mental health policy and scientific quality.

While there were many publications about the theory of salutogenesis and its concepts, there was very little evidence of the use of salutogenic principles in practice, however some broad treatment principles are suggested. The paper will conclude with some commentary and provide recommendations for practice and research, indicating where further work is needed.

2 The Salutogenic Perspective and Mental Health

a) Definition and Main Concepts of Salutogenesis

Salutogenesis is a concept derived from the work of Antonovsky (1) (2) and is concerned with exploring the origin of health. Antonovsky's particular research focus was on the search for factors that keep people healthy, especially those in difficult circumstances, as opposed to investigating the reasons for ill health.

The salutogenic approach has been described as a deep personal way of being, thinking and acting, a feeling of inner trust that things will be in order independent of whatever happens (3). Some fundamental concepts came out of Antonovsky's primary research and these have been investigated further in recent years. These core salutogenic concepts are *generalised resistance resources* (GRRs) and *a sense of coherence* (SOC).

GRRs are biological, material and psychosocial factors which make it easier for people to understand and structure their lives. Typical GRRs are money, social support, knowledge, experience, intelligence and traditions and there is significant overlap between those GRRs identified and "protective factors" for mental health identified in the discipline of psychology. It is believed that if people have these kinds of resources available to them or in their immediate surroundings, there is a better chance they will be able to deal with the challenges of life (4).

While GRRs identify important 'ingredients', a sense of coherence (SOC) provides the capability to use them. SOC is a positive way of looking at life alongside an ability to successfully manage the many stresses encountered throughout life. Three types of life experiences shape the SOC: *comprehensibility* (life has a certain predictability and can be understood), *manageability* (resources are enough to meet personal demands) and *meaningfulness* (life makes sense, problems are worth investing energy in) (1) (2). More recently, a fourth concept has been added, *emotional closeness*, which refers to the extent to which a person has emotional bonds with others and feels part of their community (5).

In order to confirm these theories more widely in terms of their relationship to health, the sense of coherence concepts were developed into a scale (6) which has been widely tested across different population groups and settings. A recent systematic review came to the conclusion that the salutogenic model is a health promoting resource in that it defines means by which individual resilience may be improved and people may be helped to feel

physically and mentally healthy, with a good quality of life and sense of well-being (7).

However, while the salutogenic approach provides us with an important lens through which we can understand how health comes about and can be maintained, there is little evidence of how salutogenic concepts can be put to good use in policies to help people and communities. Antonovsky himself recognised that a salutogenic perspective provides no prescription for a good life but only a better understanding of health and illness (8).

Key points

- The concept of creating health known as *salutogenesis* and developed by Antonovsky aims to explain why some people fall ill under stress and others do not.
- Two main factors promote salutogenesis: Generalised Resistance Factors (such as money, social support, knowledge, experience, intelligence and traditions) and Sense of Coherence (a positive way of viewing life and an ability to manage the many stresses met through life).
- The salutogenic model is a health promoting resource that encourages a person to feel physically and mentally healthy, with a good quality of life and sense of well-being.
- There is little evidence indicating how salutogenic concepts can be put to good use to help people and communities.

b) Related Concepts

It must be noted that Antonovsky's theories on salutogenesis do not have the monopoly on how positive health can be explained; there are indeed other concepts that can help us to understand states of health and coping in difficult circumstances. Lundman et al (9) made a theoretical analysis of concepts such as resilience, hardiness and purpose in life conjunction with sense of coherence, and identified a common theme of 'inner strength' to explain positive health states. Connected to this, and discussed more in the next section, is the term 'successful ageing' (10) (11) (11) which has important cross-cutting psychosocial components that strongly affect the sense of overall well-being.

Meisenheider (12) also highlighted the value of religion, citing a particularly strong connection between religious beliefs and mental health, shown as lower rates of depression, higher self-esteem, and greater social support. Some authors are now referring to concepts such as these as being subsumed within a 'family' of salutogenic perspectives that together provide a strong picture of positive health across the lifespan (4, 13) (14) (9).

Key points

- Antonovsky's salutogenic concepts are not the only ways of looking at how people can maintain positive mental health.
- There are other related concepts or factors such as resilience, hardiness and religious beliefs which are being subsumed within a 'family' of salutogenic perspectives.

c) Salutogenesis and Policy

From a policy point of view, there are also clear links to this framework. Recently salutogenic thinking has entered discussion about public health, and has been proposed as a possible theoretical basis for health promotion in general (20) (21) (22). The association that salutogenesis has with coping in adversity has also prompted debate about how it could be blended into social inclusion policy.

The World Health Organisation for example has drawn upon salutogenic theory in its *Assets for Health and Development Programme* (23) for identifying key 'health assets' that will help to reduce health inequalities. An underlying idea is that the salutogenic concepts of personal and environmental resources and a sense of coherence could be used by communities to create conditions which would help citizens to cope better with life's challenges. Canvin et al (14) suggest that, from a policy perspective, taking this kind of approach offers the possibility of a more balanced debate when considering the health and welfare of disadvantaged groups by providing a framework to consider different aspects of "disadvantage" and to tackle the problem holistically.

Key points

- Salutogenic thinking is beginning to gain acceptance among health policy makers as a useful model for promoting health and addressing health inequalities.
- Salutogenic concepts of personal and environmental resources and a sense of coherence could be used by communities to create conditions that help citizens to cope better with life's challenges.

3 Application of the Salutogenic Approach to Older People's Mental Health Promotion

While there was not very much literature directly relating to older people, three main themes could be identified that provide some insight into how a salutogenic approach is able to inform our understanding of mental health promotion and older people.

Firstly, studies were found that show how the SOC concept has helped to identify links between certain personal attributes and positive mental health. Secondly, models of healthy ageing emerged, either through existing concepts such as 'successful ageing', or through research studies designed using salutogenic frameworks. Thirdly, there were a few examples of studies that had combined salutogenic principles in health care to promote older people's mental health, and to improve professional practice. To end this section, some main salutogenic treatment principles are summarised.

a) The Sense of Coherence Scale

In the literature, the SOC scale remains popular and has been used extensively in health research, either on its own or with other instruments that measure health. The scale has become an important tool in measuring quality of life, especially mental health (7), and in identifying links between a range of different issues. Research in this area has also highlighted SOC as being developmental (i.e. developing throughout the life-course) and determined by life experiences.

A number of studies that have a particular focus on older people illustrate this. Soderhamn & Holmgren (15), for example, showed that SOC is a strong predictor of good health among active older Swedish people; and in a study of older Italians, Ciairano et al (16) highlighted a connection between high levels of education, successful careers when in employment, and strong SOC scores. Langeland & Wahl (17) used SOC as an outcome measure to demonstrate the benefits of a social support project for mental health service users, while Rena et al (18) found that SOC was significantly related to how people adjust to disability in both individuals with a disability and their spouses. Rena and colleagues indicate that SOC can explain individual differences in coping regardless of how severe the disability is.

With a focus on carers and from a service use perspective, Chumbler et al (19) studied the relationship between SOC and the service use of carers of seniors with a mental health problem. The authors discovered that lower service use was connected to a stronger SOC, and urged clinicians and those developing mental health services to use the SOC scale to lessen the detrimental effects of care giving by identifying those at higher risk of needing services.

Key points

- The sense of coherence scale has been useful in identifying a range of potentially protective personal and environmental factors that can predict positive mental health in older age.
- Sense of Coherence (SOC) can be seen as developmental and determined by life experiences.
- With a focus on coping and social support, SOC can help people adjust to disability, assist those with an existing mental health problem to cope better, and reduce carers' use of mental health services.

b) Salutogenesis and Models of Healthy Ageing

(i) Successful Ageing

The literature on successful ageing has connections with a salutogenic approach and provides useful insights into how to promote health and well-being in older age. Reviews undertaken by Bowling & Dieppe (11) and Depp & Jeste (24) agree that the main themes emerging from the theoretical literature have both biomedical and psychosocial components.

As might be expected, biomedical theories define successful ageing as optimising life expectancy while keeping physical and mental decline to a minimum. There is a focus on the absence of chronic disease, good health and high levels of people being able to live independently.

Dividing older people into 'diseased' and 'normal' however has been criticised for not recognising the many different kinds of older people among this population. Rowe and Kahn (10) overcame this by separating out 'usual ageing', which refers to normal decline due to age and living conditions, and 'successful ageing', in which decline is kept to a minimum and living conditions play a positive role. A factor in successful ageing relates to the importance of active engagement with life, which includes being independent and having social support.

Rowe and Kahn's model seems to be the most widely used approach but it does not consider the fact that a disease-free older age is not realistic for most people (11). Also, many older people who suffer ill-health would not necessarily see this as a drawback to successful ageing. To this end, lay interpretations have provided much insight to what healthy ageing means and this is explored in the next section.

Psychosocial components of successful ageing include participating in a social life, personal growth, and a strong emphasis on being satisfied with life. Life satisfaction includes aspects such as zest, resolution and fortitude, happiness, morale, self-concept and mood (11).

Authors suggest a number of psychological resources for successful ageing which include a positive outlook and self-worth, self-efficacy and a sense of control over life. Particularly important are how people can learn to cope and adapt in the face of changing circumstances: encountering health problems, for example, would mean that a person would have to put into play certain strategies to keep their independence, autonomy, participation in their social life and personal reserve (27).

Successful ageing is thus seen as an ever-changing and developing process over the life course, and as the ability to grow and learn by using past experiences to cope with present circumstances (28). The links with the components of salutogenesis are evident here.

Key points

- The concept of successful ageing is linked to salutogenesis and resources include a positive outlook and self-worth, self-efficacy and a sense of control over life.
- There is a strong emphasis on life satisfaction.
- Successful ageing is a developmental process over the life course, with the ability to grow and learn by using past experiences to cope with present circumstances.

(ii) Models of Healthy Ageing from a Lay Perspective

Studies that develop models of healthy ageing have mostly involved measuring clinical and functional aspects, and there are a few investigations into older peoples' own views of what the connections are between old age and a positive sense of well being and mental health. These studies are significant in revealing a number of components that can be seen as having salutogenic qualities, but are not captured by other models.

Bryant et al (29) conducted a qualitative study of 22 older people who had taken part in a previous primary care clinical trial. How they reported their own health was different from that predicted by statistical tests on the trial data. Interview questions were framed around a number of factors such as abilities that were valued, well-being, control, relationships and also included a sense of coherence. A model of healthy ageing came through; health to the participants meant *going and doing something meaningful*. This activity required four parts: having something worthwhile to do, having a balance between abilities and challenges, having appropriate resources to draw on, and having a positive attitude.

A study conducted by Phelan et al (30) adds to this by highlighting the importance of accomplishments, physical appearance, being productive, sense of purpose and sense of humour to older peoples' ideas of positive well-being. Some of these components were also in Forssén's (31) study of twenty older Swedish women living in poverty, where the author discovered that humour, beauty and culture formed a greater part of the women's survival strategies than was expected. Joking with friends and workmates, for example made hard, low-status tasks easier, helped the women endure pain, and assisted with marital difficulties. Beauty was found in gardening and weaving, knitting and needlework and gave a great sense of happiness and satisfaction. Gains from cultural activities such as music, dancing, literature and arts were social, aesthetic and gave a feeling of recognition and being heard.

Finally, from a carer's perspective, Potgieter & Heyns (32) undertook a small study with older women in South

Africa who were caring for a spouse with Alzheimer's disease. Despite the fact that measurement of their mental health put the participants at high risk of developing a mental health problem, results from interviews, focus groups and personal diaries revealed a number of key 'protective' factors. These key factors included being able to get the support they needed and a focus on religion, and their effects were to develop resilience and contribute towards well-being. The authors note the strong links to SOC and describe the caregivers as trying to understand, manage and give meaning to their lives on a daily basis.

Despite the small numbers of participants, these studies are otherwise well-conducted and rich in description, as well as being closely connected to salutogenic principles. The views are relevant across different settings and to older people, older carers and younger carers alike. In revealing the often 'unheard voice' of older people, particularly those in difficult circumstances or prone to illness, the authors have some valuable messages for the caring professions.

Bryant et al (29) suggest that by reframing healthy ageing in older people's own terms, their model encourages more interdisciplinary perspective to promoting positive mental health - an approach to care that uses the skills of many different professionals working together. It also helps professionals to centre on the achievement of goals and outcomes wanted by older people themselves, in contrast to the medical approach which can often exclusively focus on deficits and challenges.

In addition, Forssén (31) urges professionals to notice the special health promoting knowledge which older women, as life-long caregivers, possess, and consider their humour, aesthetic and cultural needs when delivering care. Potgieter & Heyns (32) sum up by stating that positive psychology, particularly in the field of salutogenesis, should play an important role in ensuring that the psychological well-being of vulnerable groups is kept at an optimal level.

Key points

- Lay perspectives are important in giving us a more complete picture of the factors favour coping in later life and in adverse circumstances.
- Research in a number of countries has shown the importance of older people's own views on what helps them keep a positive outlook on life and develop resilience.
- Factors such as a sense of purpose, humour, beauty, religion and culture have been identified by older people as important in building well-being.
- These studies highlight the importance of a person-centred approach in identifying aspects that promote mental health in older age.

c) Interventions Using Salutogenic Principles

(i) Interventions to promote older peoples' positive health

Overall there were very few studies found that specifically applied salutogenic principles to promote positive health among older people, or that tested the effects. What was found in abundance however were studies that were investigating the value of concepts related to the 'family' of salutogenic principles, such as coping, mobilisation of resources and social support, but these studies did not overtly specify any links to salutogenesis (33) (34). A study undertaken by Langeland and colleagues does claim to relate directly to salutogenesis and is reviewed here in order to provide an illustration of work in this area.

Langeland et al (35) conducted a trial in Norway to investigate whether salutogenic treatment principles could help people cope with mental health problems. A total of 116 people with an age range of 20-80 (amount of over 65's was unknown) attending a psychiatric outpatients unit were divided into control (usual treatment) and intervention (new treatment) groups. The intervention consisted of a series of talk-therapy sessions with a mental health professional focusing on coping with everyday life over a 19 week period. In addition, homework consisted of preparing a reflection, based on aspects such as feelings and personal relations, with the purpose of identifying and building internal and external resources (36). The SOC questionnaire and a symptom checklist were used to assess coping before and after the intervention, alongside a form that participants completed themselves about their views of the intervention.

Results showed that coping improved more in the intervention group than the control group, with people seeming to be better at managing their mental health problems. These results also appeared to be still evident after six months. The size of the study and its results were relatively small, and as the authors did not report age differences, it is not possible to say whether older people specifically would benefit from an intervention like this. Further testing on a wider scale would be required to check this. However, the authors conclude that using salutogenic principles could aid recovery among people with mental health problems.

Key points

- There seems to be very few studies that use salutogenic principles to promote positive health among older people, or that tested the effects of such intervention.
- According to Langeland and colleagues, using salutogenic principles could aid recovery among people with mental health problems.

(ii) Application to Professional Practice

The benefits of using the salutogenic framework to improve professional care are best shown through a discussion of studies that have used Antonovsky's theories to design either guidelines or interventions. While the range of information on this subject was very small, five studies have been reviewed as examples that have drawn upon this work, and relate to professionals. These studies have a broader and less specific connection to the care of older people, but provide a general impression of research in this area.

There are two themes to this section: the first looks at professionals themselves in relation to work-related stress and conflict in the working environment, which are important factors for mental health promotion of those cared for at home or in residences; the second gives two examples of how professional practice can be improved for families of the terminally ill and the bereaved, who are often older people themselves.

Focus on Staff: Stress and Conflict in the Professional Environment

With a focus on doctors, Rabin et al (37) developed a set of recommendations using a salutogenic perspective to examine and treat occupational stress among physicians in order to prevent 'burn-out'. The authors advocate offering doctors 'in-house' training, educational programmes, individual supervision, and support groups to help doctors promote their own work and encourage collaboration between different professionals. Although the guidelines have yet to be tested, Rabin et al argue that these mechanisms would help doctors to view their work according to outcomes that were more meaningful to them, using principles associated with the sense of coherence model.

Centered on nurses, Berg & Hallberg's (38) research developed interventions aimed at supporting those caring for psychiatric patients. The authors investigated the benefits of one year of regular clinical supervision in a group; the nurses in this group also had their care plans supervised. Nurses' views were collected using the SOC scale and other measures of satisfaction and working environment.

The impact of the intervention produced mixed results. It increased aspects such as the uptake of new ways to practice and benefits attributable to clinical supervision, as well as reducing conflict between staff members. However, there was no particular change in the SOC scores, and also little evidence that the intervention helped to reduce *problems* between staff. An intervention of this nature may therefore constitute one particular kind of support strategy that improves creativity but has limited effect on professional outcomes.

The third study looked at how conflict can be resolved between medically and socially trained nurses working in special types of housing for older people in Sweden (39). The working environment was investigated in relation to SOC, job satisfaction and burn-out. The intervention was rolled out using counseling and supervision discussion groups and was based upon the idea that an individual's personality and emotional feelings would be important for helping to build a less stressful atmosphere. The results did not show that the intervention was successful: there were no significant differences in any of the factors being investigated.

While there is not sufficient research in this area to draw any firm conclusions, those reviewed show inconclusive evidence for the effectiveness of applying salutogenic approaches to improve professional stress, and particularly do not seems suited to resolving conflict. Fundamental research design issues may have been at fault, as some authors suggest, however it is not possible at this stage to find any meaningful and transferable principles from these studies to help those professionals working in the field of mental health and older people.

Focus on Professional Practice: Palliative Care and working with those Bereaved

The two studies reviewed here developed frameworks and recommendations for improving professional practice. From the perspective of families of the terminally ill, Milberg & Strang's (40) aim was to develop a theoretical framework of the families' experiences of palliative home care staff. The framework was based on an analysis of four previous studies and applied a salutogenic perspective to the data.

The authors' analysis suggested important factors that need to be included in palliative care services for goal-setting and evaluation of staff. Examples of this include competence, support, the spectrum of services available, continuity, and accessibility. Of particular importance were specific interactions between patients and staff which included patients being at the centre of, and participating in care.

The second study conducted by Kyriakopoulos (41) introduced a further theoretical framework to improve specialist

professional practice with the bereaved through the use of a salutogenic counseling framework. The author claims that salutogenic principles can help to strengthen a bereaved person's sense of coherence by promoting a 'healthy' grieving process, and reducing any long-term psychological and physiological consequences. The intervention concentrates on certain grief rituals, and by combining specific elements from the salutogenic approach, sets out a model that could be helpful in work with the bereaved. Kyriakopoulos advocates that the model should be used in any professional work related to grief, especially in cases when people show signs of traumatic grief.

Key points

- The benefits of using the salutogenic framework in attempting to improve professional practice are not well researched, but give us some useful indicators for practice.
- Examples of salutogenic principles being used to shape professional practice include in palliative care and working with the bereaved, relating to specialist practice and providing guidelines.

d) Salutogenic Treatment Principles

As discussed above, while the evidence does not help us to make a comprehensive and definitive list of treatment principles for practice, there are a few useful and relevant suggestions from the literature reviewed that could be helpful as starting points for discussion.

Salutogenic Treatment Principles

- Salutogenic principles may enrich how professionals interact with and care for service users, particularly for those who are at risk of mental health decline.
- There are indications from all the studies that the focus on enabling people to cope may be beneficial for users, carers and professionals.
- Studies on the sense of coherence have highlighted the importance of social support to manage the flow of internal and external resources that will promote positive health.
- Using the Sense Of Coherence principles when developing mental health services may help to lessen the detrimental effects of care-giving for those carers supporting older people with mental health decline., who are often older people themselves.
- Planning care for healthy ageing using older people's own terms and using their own knowledge may encourage a more comprehensive and interdisciplinary perspective to promoting positive mental health and will help professionals to centre on the achievement of goals and outcomes which are priorities for older people themselves.

4 Commentary

The aim of this paper was to provide an initial overview of the relationship between salutogenesis and mental health promotion of older people. A number of interesting features have emerged which shed light on the subject and provide a possible direction for recommendations in this area.

It is clear that the most prominent and accessible published work came largely from the Scandinavian countries, where authors Monika Eriksson and Bengt Lindström have made a valuable contribution to broadening our understanding. Through its focus on positive health, it would seem that salutogenesis could provide a worthwhile theoretical framework for research activity and practice interventions, especially in its associated SOC concepts for which measures have been widely tested and validated.

The literature reviewed here suggests there is considerable practice and policy potential for this concept, particularly in relation to coping in adversity in a variety of situations. This applies to promoting positive health among older people and carers, and reducing service use. The strong coping focus also fits well with the potential for enhancing public health interventions. In addition, the European Commission's emphasis on social inclusion could benefit from incorporating salutogenic frameworks into policy.

It has yet to be shown through research whether these concepts can make the leap to implementation and demonstrate measurable benefits in a more convincing way. As could be seen from the practice examples, the skills and resources needed for professionals to put a salutogenic framework into practice are somewhat abstract, even if they were to be at the disposal of today's cost-cutting health and social care systems. Langeland et al (35) have gone some way to demonstrating that salutogenic benefits can be established when integrated into interventions. But in general, evidence that such concepts can be successfully applied to promote long term

mental health benefits across different cultures and contexts remains elusive. It would seem that at the moment the salutogenic approach cannot take us any further than an explanatory model, despite its theoretical value.

It could be argued that enhancing coping skills and building a vulnerable person's ability to sustain health in adversity has long been a primary health promotion strategy (42) (43). Most studies and discussion papers reviewed here indeed urge professionals to integrate principles into practice as a matter of course, as the benefits of positive mental health are self-evident. So, given the natural logic of these concepts, there is an argument for moving the debate on from whether salutogenesis has real credibility in the healthcare setting to how these concepts can be best applied by healthcare providers to add value for people in all their different conditions

But the lack of demonstrable benefits does raise questions as to whether health-enhancing salutogenic concepts can be transferred or whether, as Antonovsky originally infers, salutogenesis can only help us understand health states more. Given the dearth of research, there may be some barriers, tensions and compatibility issues yet to be discovered regarding the practical application of salutogenic principles, their integration into interventions, and their measurement of effectiveness.

For example, some of the attributes described, such as 'inner strength' and a positive orientation on life are deeply personality-based and may even be, to an extent, genetically determined, and so not easily modifiable by external policy or practice. Geyer's early critique of SOC may give some explanation for this (44): Referring to the sociological background of the concept, he suggests that SOC is an attitude of people who are well-educated, privileged and with opportunities for decision-making and resources at hand to draw upon. As a concept, it is therefore not easily transferable to other less advantaged social groupings, because the opportunities to develop SOC will not be taken in the absence of resources to draw upon. On the other hand, it is clear that the Sense Of Coherence is something that is affected by developmental factors, and an older person's SOC will be partly determined by earlier life experiences, which can be influenced and determined, in part, by public policy and interventions throughout the individual life-span.

In conclusion, despite reservations about the current scale and scope of the body of research into salutogenesis, it is very evident is that this is a compelling, thought-provoking and fascinating area of study, which can potentially elucidate elements of human nature of relevance to mental health promotion. The possibility to reconnect healthcare with what makes humans thrive in difficult circumstances suggests a massive untapped potential to improve the quality and effectiveness of health and social care services. In Antonovsky's seminal words, this certainly warrants more exploration to continue to 'unravel the mystery of health'.

5 Recommendations

- A more comprehensive international literature review is needed. This should be widened to include an
 investigation and comparison of practice benefits within the broader 'family' of salutogenic concepts and
 needs to include the following:
 - There is a need to explore how knowledge about a range of positive health states derived from related concepts such as resilience, hardiness and successful ageing can be evaluated, assimilated and blended to build a more comprehensive sphere of salutogenic treatment principles.
 - Design methods from such studies can help those researching salutogenesis to gain a better understanding of and explore how evidence can be accumulated from applying salutogenic principles to interventions.
- As revealed by the application to practice literature described, further research should focus on the potential benefits of practice strategies such as
 - How to help people and communities mobilise internal and external resources and an evaluation of the extent to which this is possible.
 - O How professionals can best adopt a practice orientation towards coping, using a person-centred approach.
 - O How professionals can work together in a more interdisciplinary manner to enhance salutogenic benefits of creating positive health in older age.
 - Testing and comparing salutogenic interventions among specific groups, such as different ethnic or secular minorities, asylum seekers or other vulnerable elders.



References

- 1. Antonovsky A. Health, stress and coping. San Francisco; London: Jossey-Bass; 1979.
- 2. Antonovsky A. Unraveling the mystery of health: how people manage stress and stay well. 1st ed. ed. San Francisco, Calif.: Jossey-Bass; 1987.
- 3. Lindström B, Erikkson, M, editor. The Salutogenic Perspective and Mental Health. Melbourne: World Health Organisation; 2005.
- 4. Lindström B, Eriksson M. Salutogenesis. J Epidemiol Community Health. 2005 Jun;59(6):440-2.
- 5. Sagy S, Antonovsky H. The development of the sense of coherence: a retrospective study of early life experiences in the family. Int J Aging Hum Dev. 2000;51(2):155-66.
- Antonovsky A. The structure and properties of the sense of coherence scale. Soc Sci Med. 1993 Mar;36(6):725-33
- 7. Eriksson M, Lindström B. Antonovsky's sense of coherence scale and the relation with health: a systematic review. J Epidemiol Community Health. 2006 May;60(5):376-81.
- 8. Antonovsky A. The moral and the healthy: identical, overlapping or orthogonal? Isr J Psychiatry Relat Sci. 1995;32(1):5-13.
- 9. Lundman B, Alex L, Jonsen E, Norberg A, Nygren B, Santamaki Fischer R, et al. Inner strength--a theoretical analysis of salutogenic concepts. Int J Nurs Stud. 2010 Feb;47(2):251-60.
- 10. Rowe JW, Kahn RL. Successful aging. New York: Pantheon Books; 1998.
- 11. Bowling A, Dieppe P. What is successful ageing and who should define it? BMJ. 2005 Dec 24;331(7531):1548-51
- 12. Meisenhelder JB. Gender differences in religiosity and functional health in the elderly. Geriatr Nurs. 2003 Nov-Dec;24(6):343-7.
- 13. Almedom AM. Resilience, hardiness, sense of coherence, and posttraumatic growth: All paths leading to "light at the end of the tunnel"? J Loss Trauma. 2005 May-Jun;10(3):253-65.
- 14. Canvin K, Marttila A, Burstrom B, Whitehead M. Tales of the unexpected? Hidden resilience in poor households in Britain. Soc Sci Med. 2009 Jul;69(2):238-45.
- 15. Soderhamn O, Holmgren L. Testing Antonovsky's sense of coherence (SOC) scale among Swedish physically active older people. Scand J Psychol. 2004 Jul;45(3):215-21.
- 16. Ciairano S, Rabaglietti, E., De Martini, R., Giletta, M. Older Peoples Sense of Coherence: Relationships with Education, Former Occupation and Living Arrangements. Ageing and Society. 2008;28(8):1075-91.
- 17. Langeland E, Wahl AK. The impact of social support on mental health service users' sense of coherence: a longitudinal panel survey. Int J Nurs Stud. 2009 Jun;46(6):830-7.
- 18. Rena F, Moshe S, Abraham O. Couples' adjustment to one partner's disability: the relationship between sense of coherence and adjustment. Soc Sci Med. 1996 Jul;43(2):163-71.
- 19. Chumbler NR, Fortney, J., Cody, M., Beck, C. Community-Dwelling Cognitively-Impaired Seniors. Research in the Sociology of Health Care. 2007;22:159-73.
- 20. Lindström B, Eriksson M. Contextualizing salutogenesis and Antonovsky in public health development. Health Promot Int. 2006 Sep;21(3):238-44.
- 21. Lindström B, Eriksson M. The salutogenic approach to the making of HiAP/healthy public policy: illustrated by a case study. Glob Health Promot. 2009 Mar;16(1):17-28.
- 22. Eriksson M, Lindström B. A salutogenic interpretation of the Ottawa Charter. Health Promot Int. 2008 Jun;23(2):190-9.
- 23. Harrison D, Ziglio, E., Levin, L., & Morgan, A. Assets for health and development: Developing a conceptual framework. Venice: European Office for Investment for Health and Development: World Health Organisation; 2004.
- 24. Depp CA, Jeste, D. V. Definitions and Predictors of Successful Aging: A Comprehensive Review of Larger Quantitative Studies. The Journal of Lifelong Learning in Psychiatry. 2009;7(1):137-50.
- 25. Seeman TE, Charpentier, P. A., Berkman, L. F., Tinetti, M. E., Guralnik, J. M., Albert, M. et al. Predicting changes in physical performance in a high-functioning elderly cohort. MacArthur studies of successful aging. Journal of Gerontology. 1994;49:M97-108.
- 26. Andrews G, Clark, M., Luszcz, M. Successful aging in the Australian longitudinal study of aging: applying the MacArthur model cross-nationally. Journal of Social Issues. 2002;58:749-65.
- 27. Baltes PB, Baltes MM. Successful aging : perspectives from the behavioral sciences. Cambridge: Cambridge University Press; 1990.
- 28. Ryff CD. Beyond Ponce de Leon and life satisfaction: new directions in quest of successful aging. International Journal of Behavioral Development. 1989;12:35-55.
- 29. Bryant LL, Corbett KK, Kutner JS. In their own words: a model of healthy aging. Soc Sci Med. 2001 Oct;53(7):927-41.
- 30. Phelan EA, Anderson LA, LaCroix AZ, Larson EB. Older adults' views of "successful aging"--how do they compare

- with researchers' definitions? J Am Geriatr Soc. 2004 Feb;52(2):211-6.
- 31. Forssén a. Humour, beauty, and culture as personal health resources: Experiences of elderly Swedish women. Scandinavian Journal of Public Health. 2007;35:228-34.
- 32. Potgieter JC, Heyns, P. M. Caring for a spouse with Alzheimer's disease: Stressors and strengths. South African Journal of Psychology. 2006;36(3):547-63.
- 33. Cattan M, White M, Bond J, Learmouth A. Preventing social isolation and loneliness among older people: a systematic review of health promotion intervention. Ageing and Society 200525, 41-67.
- 34. Greaves CJ, Farbus L Effects of creative and social activity on the health and well-being of socially isolated older people: outcomes from a multi-method observational study. J.R. Soc. Promot. Health 2006 May 126 (3) 134-42.
- 35. Langeland E, Riise T, Hanestad BR, Nortvedt MW, Kristoffersen K, Wahl AK. The effect of salutogenic treatment principles on coping with mental health problems A randomised controlled trial. Patient Educ Couns. 2006 Aug;62(2):212-9.
- 36. Langeland E, Wahl AK, Kristoffersen K, Hanestad BR. Promoting coping: salutogenesis among people with mental health problems. Issues Ment Health Nurs. 2007 Mar;28(3):275-95.
- 37. Rabin S, Matalon, A., Maoz., B., Shiber, A. Keeping Doctors Healthy: A Salutogenic Perspective. Families, Systems and Health. 2005;23(1):94-102.
- 38.Berg A, Hallberg IR. Effects of systematic clinical supervision on psychiatric nurses' sense of coherence, creativity, work-related strain, job satisfaction and view of the effects from clinical supervision: a pre-post test design. J Psychiatr Ment Health Nurs. 1999 Oct;6(5):371-81.
- 39. Forsgärde M, Westman, B., Nygren, L. Ethical discussion groups as an intervention to improve the climate in interprofessional work with the elderly and disabled. Journal of Interprofessional Care. 2000;14(4):351-61.
- 40. Milberg A, Strang P. What to do when 'there is nothing more to do'? A study within a salutogenic framework of family members' experience of palliative home care staff. Psychooncology. 2007 Aug;16(8):741-51.
- 41. Kyriakopoulos AT. Grief, salutogenesis, rituals and counselling: a multidimensional framework for working with the bereaved. European Journal of Psychotherapy and Counselling. 2008;10(4):341-53.
- 42. Thoits PA. Stress, coping, and social support processes: where are we? What next? J Health Soc Behav. 1995; Spec No:53-79.
- 43. Barr VJ, Robinson S, Marin-Link B, Underhill L, Dotts A, Ravensdale D, et al. The expanded Chronic Care Model: an integration of concepts and strategies from population health promotion and the Chronic Care Model. Hosp Q. 2003;7(1):73-82.
- 44. Geyer S. Some conceptual considerations on the sense of coherence. Soc Sci Med. 1997 Jun;44(12):1771-9.

