Evidence-Based Summary

Salutogenesis: A bona fide guide towards health preservation

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ABSTRACT

Preserving health requires a holistic approach involving the component of physical, mental, social, and spiritual well-being as stated by World Health Organisation. Salutogenesis concept focuses on the factors responsible for well-being rather than the disease pathogenesis in contrary to pathogenesis concept. This evidence-based summary tries to shed a light on existing concept called salutogenesis which is much required in the current scenario.

Keywords: Health, preservation, promotion, salutogenesis

Introduction

Taking care of one's own health is probably the most neglected part of an individuals' life. We often consult a doctor when we are ill but never introspect on the conditions which are keeping us in good health. If we compare our health with an elastic band that stretches itself till it breaks, it may not be wrong. Aren't we doing the same with our health (not disease), stretching it with many in apparent pathologic conditions and waiting for it to break one day which will terminate either with a disability or death?

Health and disease are two contrary situations in which the whole medical industry relies upon. Maintaining health and treating disease are two difficult tasks which are still to be conquered. Modern medicine mostly talks about pathology and the pathogenesis of a disease condition. However, there is a

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Received: 29-03-2019 **Revised:** 11-11-2019 **Accepted:** 15-11-2019 **Published:** 28-01-2020

Access this article online



Website: www.jfmpc.com

DOI:

10.4103/jfmpc.jfmpc_260_19

whole different concept called "Salutogenesis" which focuses exactly opposite to modern medicine – not the pathogenesis but health factors that keep in good health.

An Israeli American Sociologist named Aaron Antonovsky who first conceptualized the theory of "Salutogenesis" in accordance with maintaining good health by conducting an epidemiological experiment on menopausal women of Israel, who were survivors of the Nazi concentration camps of Second World War. In his book "Health, Stress, and Coping" he presented the theory of "Salutogenesis" for the first time where his idea was to focus more on people's potential of sustaining health and well-being than on pathogenesis of the disease. [1] The theory boldly accepts that sufferings are part and parcel of life which are inevitable. However, many people who are in the same circumstances are able to cope up with their anxiety and pressure when compared to others. As it is evident from the examples of holocaust survivors of second world war that every stressful situation of life may not end up in disease or ill-being but may be due to insufficiently managed

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How to cite this article: Bhattacharya S, Pradhan KB, Bashar MA, Tripathi S, Thiyagarajan A, Srivastava A, *et al.* Salutogenesis: A bona fide guide towards health preservation. J Family Med Prim Care 2020;9:16-9.

tension. This implies that the assumption that all anxiety-ridden life experiences are intrinsically unpleasant is wrong.

Pathogenesis vs Salutogenesis

In medical science, the pathogenesis concept is important to understand diseases process; how the diseases develop and how through the application of this knowledge, healing mechanisms, or interventions can be developed. Salutogenesis concept, on the other hand, contributes to our understanding of the development and maintenance of health. The curative resources, potential for active adaptation to unaccustomed situation and changes made to reduce risk alleviation and resource development are given much emphasis.

According to Antonovsky's idea, it is more important to focus on people's resources and dimensions to create health and well-being than the classic focus of medical fraternity on risks, ill health, and disease. In salutogenic model, health is considered as a position on health ease and disease continuum, instead of positioning health and disease opposite to each other, i.e. dichotomy which is main the feature of pathogenic model. Antonovsky also stated that disease and stress occur everywhere and all the time and it is part of life and natural condition. So, it is incorrect to assume that stressful life experiences are inherently bad. Stress causes a state of tension in an individual, but the physical outcome of that tension is dependent on the adequacy of the individual's tension management.

To explain this, Antonovsky formulated two key terms "Sense of Coherence" (SOC) and "General Resistance Resources" (GRRs).

Antonovsky^[2,3] defined SOC as "a global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that

- 1. The stimuli deriving from one's internal and external environments in the course of living are structured, predictable, and explicable.
- 2. The resources are available to one to meet the demands posed by stimuli.
- These demands are challenges, worthy of investment and engagement".

SOC is a theoretical concept that is defined to characterize the belief that what happens in life is understandable, controllable, and significant; which is hypothesized as a flexible and adaptive dispositional orientation of life that enables effective coping with adverse experience and the maintenance of good health.

In the traditional disease-oriented (pathogenic) model of health, the focus is on causes of disease. Accordingly, the disease control strategies target these causes e.g. smoking, overweight and so on. In salutogenic model, the emphasis is put on the factors which cause global well-being. It focuses on creation and maintenance of good health rather than to look for the cause of specific

diseases. This is opposite of traditional pathogenic model which focus on risk factors involved in disease generation. From the therapeutic point of view, the pathogenic model implies the use of external healing devices and interventions to eliminate the pathogenic factors.

As a contrast, in the salutogenic model, the emphasis is on our internal healing resources and potential for active adaptation to new circumstances. The aim of both approaches is to attain good health. The Salutogenesis model focuses on positive aspects.

Sense of coherence (SOC) in health preservation

The SOC is defined as "the way of perceiving life and ability to manage successfully the infinite number of stressors that one encounters in one's life". SOC is our capability to perceive that we can manage independently whatever is happening in our lives. One could say that SOC functions as our "sixth sense" for survival and helps in the generation of our health-promoting ability. Antonovsky claimed that SOC can be learned and that it develops over the lifespan. But it fluctuates dynamically throughout life. Antonovsky postulated that SOC was mainly formed in the first decades of life. [4-6]

Types under SOC

SOC are of three types-

- 1. Comprehensibility To understanding the problem
- 2. Manageability To realize that threat can be managed with the available resources and
- Meaningfulness To extract something meaningful from the stress.

Becker *et al.* in their review article have introduced the theory of pathogenesis as "Retrospective" and theory of Salutogenesis as "Prospective" and suggest the expansion of salutogenic model into science of positive health. [6] The relationship between sense of coherence and coronary heart disease has been worked out by Poppius *et al.* in which they reveal that workers with high SOC had nearly half the risk of CHD when compared to individuals with low SOC. [7]

The salutogenic model also substantiates significant relationship between mother's SOC and their children's dental caries status. [8] A major threat to global public health has emerged in the form of type 2 diabetes mellitus for which salutogenesis has been used as an instrument to study biopsychosocial domains of the disease and health-related communications. [9] Other evidence also suggested that the salutogenic concept was applied to different areas of treatment successfully. [10-12] The model can be elaborated for preventive approaches in national health programs especially in noncommunicable diseases.

General Resistance Resources (GRR)

To describe the development of the SOC, Antonovsky used the concept of GRRs - each of which can simplify evading or

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opposing a wide variety of stress and hardships. These GRRs are individual characteristics assimilated by means of socialization and genetics. It is found within people as resource-bound; their immediate and distant environment as of both material and nonmaterial capabilities from the individual to the entire society.^[13]

But the key issue is, not what resources are existing but whether the person is able to use and reuse them appropriately for the envisioned purpose. When a person experiences the obtainability of GRRs, a solid SOC cultivates in them.^[14] Hence, both are interrelated as strong SOC person can bring the necessary GRR in play.^[15-17]

Typical GRRs are

- Physical and Chemical (money, housing, clothing, food, power, intact neurological and immune system, healthy behaviors, etc.)
- 2. **Cognitive** (intelligence, knowledge, experience, education)
- 3. **Emotional** (self-esteem)
- 4. Interpersonal Relations (social support, interaction).
- 5. Macrosocial (culture, religion)

GRRs help us to make sense of the countless stressors and hardships which we constantly confront. The strong SOC is positively associated with higher-level education, income, other psychosocial characteristics including self-esteem, self-motivation, etc., and negatively associated with depression, psychological distress, anxiety, and negative affectivity.^[18]

A parallel may be drawn with *Bhagavata Gita*, the Hindu scripture, which also tries to rationalize and help us accept whatever adverse things happen to us.^[19-21] *Gita* says, whatever has happened was OK, whatever is happening is also OK, and whatever will happen will also be OK. *Gita* also tries to explain and rationalize whatever is happening to us or in our lives. Similarly, the SOC concept also focuses on "action" along with putting our minds at ease.

Relationship between SOC and health behaviors

SOC has been associated with several health behaviors. It is hypothesized to be a salutogenic resource influencing the etiology and recovery from diseases through effective coping. This kind of coping may include the avoidance of behaviors that directly interfere with health, such as smoking, excessive drinking, an unhealthy diet, and a sedentary lifestyle. [22] A study done among Finnish polytechnic students concluded that physical activity is correlated to the level of SOC while other studies correlate the lower rates of cigarette smoking and alcohol consumption with strong SOC. [23] It was also found that SOC correlates significantly with healthier dietary habits. [24] Consistent results obtained that higher SOC is correlated with healthy lifestyle including regular exercise when compared to persons engaged in less physical activity.

Researchers suggested that in nonsmokers, an improvement in exercise enhances immunity by acting on natural killer cell activity

through an increased SOC. Midanik *et al.* found to have higher SOC levels in a subsample of light drinkers who reported no alcohol problem compared to a subsample of persons who were heavy drinkers, reported alcohol problems at least once in the previous year. A study among homeless persons who were treated under the drug recovery program for drug-abusing revealed that persons with stronger SOCs have shown fewer risk behaviors compared to other persons who have less SOC.^[25]

The possibility of recognizing the social environment as stressful is decreased among persons with stronger SOC. It reduces the probability of adverse neurophysiological response from the stress taking which further lowers the health-damaging effects of perceived chronic stress. However, SOC also has an influence on individual's health.

Research studies suggest that SOC is consistently linked with good health and high well-being. [26,27]

Studies have suggested SOC is positively associated with health conditions and perceived health status among older population. A strong SOC was found to be associated with decrease in mortality conditions from cardiovascular diseases.^[28] Reduction in the neck-shoulder pain was found to have correlation with SOC.^[29] Similarly, SOC also found to have associated with decrease in anxiety, depression, and clinical variables of rheumatic disorder.^[30]

Salutogenic concepts also have a potential to explain socioeconomic differentials in health. However, SOC does not intercede the consequence of childhood factors on adult health. Studies have shown that SOC act as psychosocial factor has a possibility in intervention of healthy relationship and income.^[31]

Conclusion

Studies suggest that there exists a positive association between well-being and SOC, and an inverse association between SOC and disease, disabilities, and symptoms including health complaints, dysfunctions and distress, physical symptoms and illness, burnout, sickness absence frequency, and self-rated health. It has also been anticipated that the SOC scale may serve as an assessment tool in a recovery or rehabilitation program. Thus, salutogenesis model hence proves to be consistent in preserving health through SOC and GRRs.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

References

 Antonovsky A. Health, Stress, and Coping. 1st ed. San Francisco: Jossey-bass; 1979.

Volume 9: Issue 1: January 2020

- Cattan M. Mental Health and Well Being in Later Life. McGraw-Hill Education (UK); 2009.
- 3. Antonovsky A. The salutogenic model as a theory to guide health promotion. Health Promot Int 1996;11:11-8.
- 4. Brolin M, Quennerstedt M, Maivorsdotter N, Casey A. A salutogenic strengths-based approach in practice an illustration from a school in Sweden. Curric Stud Health Phys Educ 2018;9:237-52.
- Antonovsky A. The structure and properties of the sense of coherence scale. Soc Sci Med 1993;36:725-33.
- 6. Eriksson M, Lindstrom B. Antonovsky's sense of coherence scale and the relation with health: A systematic review. J Epidemiol Community Health 2006;60:376-81.
- 7. Mittelmark MB, Bull T, Daniel M, Urke H. Specific resistance resources in the salutogenic model of health. In: Mittelmark MB, Sagy S, Eriksson M, Bauer GF, Pelikan JM, Lindström B, *et al.*, editors. The Handbook of Salutogenesis Cham (CH): Springer; 2017.
- 8. Viswanath D, Krishna AV. Correlation between dental anxiety, Sense of Coherence (SOC) and dental caries in school children from Bangalore North: A cross-sectional study. J Indian Soc Pedod Prev Dent 2015;33:15-8.
- Voseckova A, Truhlarova Z, Levicka J, Klimova B, Kuca K. Application of salutogenic concept in social work with diabetic patients. Soc Work Health Care 2017;56:244-59.
- 10. Fok SK, Chair SY, Lopez V. Sense of coherence, coping and quality of life following a critical illness. J Adv Nurs 2005;49:173-81.
- 11. Sagy S, Eriksson M, Braun-Lewensohn O. The salutogenic paradigm. In: Joseph S, editor. Positive Psychology in Practice. Hoboken, NJ, USA: John Wiley and Sons, Inc; 2015. p. 61-80.
- 12. Bodenheimer T, Wagner EH, Grumbach K. Improving primary care for patients with chronic illness. JAMA 2002;288:1775-9.
- 13. Antonovsky A. Unraveling the Mystery of Health: How People Manage Stress and Stay Well. San Francisco, CA, US: Jossey-Bass; 1987.
- 14. Idan O, Eriksson M, Al-Yagon M. The Salutogenic Model: The Role of Generalized Resistance Resources. In: Mittelmark MB, Sagy S, Eriksson M, Bauer GF, Pelikan JM, Lindström B, *et al.*, editors. The Handbook of Salutogenesis. Cham (CH): Springer; 2017.
- 15. "(PDF) The Sense of Coherence and Its Measurement," ResearchGate. [Online]. Available from: https://www.researchgate.net/publication/311995486_The_Sense_of_Coherence_and_Its_Measurement. [Last accessed 2019 Mar 21].
- 16. Feldt T, Leskinen E, Kinnunen U, Mauno S. Longitudinal

- factor analysis models in the assessment of the stability of sense of coherence. Personal Individ Differ 2000;28:239-57.
- 17. Feldt T, Leskinen E, Kinnunen U, Ruoppila I. The stability of sense of coherence: comparing two age groups in a 5-year follow-up study. Personal Individ Differ 2003;35:1151-65.
- 18. Suraj S, Singh A. Study of sense of coherence health promoting behavior in north Indian students. Indian J Med Res 2011;134:645.
- 19. "A salutogenic perspective to oral health. Sense of coherence as a determinant of oral and general health behaviours, and oral health-related quality of life." p. 80.
- Bandura A. Self-efficacy. Vol. 4. Academic Press; 1994.
 p. 71-81.
- 21. Manickam R, Sharma BR. Need of Bhagavad Gita concepts in the present scenario of professional education.
- 22. Kuuppelomäki M, Utriainen P. A 3 year follow-up study of health care students' sense of coherence and related smoking, drinking and physical exercise factors. Int J Nurs Stud 2003;40:383-8.
- 23. Hassmén P, Koivula N, Uutela A. Physical exercise and psychological well-being: A population study in Finland. Prev Med 2000;30:17-25.
- Lindmark U, Stegmayr B, Nilsson B, Lindahl B, Johansson I. Food selection associated with sense of coherence in adults. Nutr J 2005;4:9.
- 25. Nyamathi AM. Relationship of resources to emotional distress, somatic complaints, and high-risk behaviors in drug recovery and homeless minority women. Res Nurs Health 1991:14;269-77.
- 26. Eriksson M. The sense of coherence in the salutogenic model of health. In: Mittelmark MB, Sagy S, Eriksson M, Bauer GF, Pelikan JM, Lindström B, et al. editors. The Handbook of Salutogenesis. Cham (CH): Springer; 2017.
- 27. Eriksson M, Lindström B. Antonovsky's sense of coherence scale and its relation with quality of life: A systematic review. J Epidemiol Community Health 2007;61:938-44.
- 28. Surtees P, Wainwright N, Luben R, Khaw , Day N. Sense of coherence and mortality in men and women in the EPIC-Norfolk United Kingdom prospective cohort study. Am J Epidemiol 2003;158:1202-9.
- 29. Viikari-Juntura E, Vuori J, Silverstein BA, Kalimo R, Kuosma E, Videman T. A life-long prospective study on the role of psychosocial factors in neck-shoulder and low-back pain. Spine 1991;16:1056-61.
- 30. Germano D. Quality of Life and Sense of Coherence. p. 76.
- 31. Ing JD, Reutter L. Socioeconomic status, sense of coherence and health in Canadian women. Can J Public Health Rev Can Sante Publique 2003;94:224-8.