Salutogenesis 30 Years Later: Where do we go from here?

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Abstract

In 1979 Aaron Antonovsky introduced the concept of salutogenesis as the study of health development. This approach contrasted with the concept of pathogenesis or the study of disease development. Pathogenesis works retrospectively from disease to determine how individuals can avoid, manage, and/or eliminate that disease. Salutogenesis works prospectively by considering how to create, enhance, and improve physical, mental, and social well-being. Salutogenesis provides a framework for researchers and practitioners to help individuals, organizations, and society move toward optimal well-being. This article reviews the development and benefits of the salutogenic approach to health, how it complements pathogenesis, and suggests how to use the salutogenic model to develop a science for positive health. The article also suggests using salutogenesis as a basis for the new health care system in America.

Key Words: *Salutogenesis, Pathogenesis, Health Care, Positive Health, Optimal Well-Being.*

Introduction

Mother Theresa stated that she would not participate in a march against war but would participate if the march were for peace. Such a march would not only empower people to end war, but also help them move toward peace.[1] In her view, the process of creating peace was different than merely ending war. In the same way, health professionals should work to facilitate health rather than merely limit disease. Traditionally, pathogenesis, as pioneered and developed by Williamson and Pearse, is the theoretical framework for American health professionals. Formally, pathogenesis is the study of disease origins and causes.[2, 3] Pathogenesis starts by considering disease and infirmity and then works retrospectively to determine how individuals can avoid, manage, and/or eliminate that disease or infirmity.

In contrast, salutogenesis, the study of health origins and causes, starts by considering health and looks prospectively at how to create, enhance, and improve physical, mental and social well-being.[4] Across the globe, health researchers and practitioners are enhancing their work by attempting to answer questions about what leads to better health.[5] Determination of the precursors to health not only enables professionals to help those who are currently sick and want to regain their health but also assists those who want to move beyond "unsickness" to better health. While salutogenic practices are growing in Europe, Asia, and South America, they are still rare in America. [6, 7] In theory, pathogenesis and salutogenesis are complementary approaches and as America redesigns its health care system, salutogenic approaches will be necessary to address the challenges that will emerge. This article reviews the development and benefits of the salutogenic approach to health, how it complements pathogenesis, and suggests how to use a salutogenic model to develop a science for positive health that will enable researchers and practitioners to help individuals, organizations, and society move toward optimal well-being.

Origins of Salutogenesis

In 1979 Aaron Antonovsky introduced salutogenesis by asking the question, "How can this person be moved toward greater health?"[3, 8(p. 14)] Antonovsky developed this idea from studies that included survivors of the holocaust. In these studies, he found that, despite the stress created by the unthinkable circumstances holocaust survivors endured, many not only recovered and survived, they thrived. In explaining this phenomenon Antonovsky proposed that there must be health-causing factors. Ultimately out of Antonovsky's search for human factors that characterized these survivors came the salutogenesis model. This salutogenic model proposes that the goal of health research should be to identify, define, and describe pathways, factors, and causes of positive health to supplement our knowledge about how to prevent, treat, and manage negative health (pathogenesis).[8]

Antonovsky differentiated salutogenesis from pathogenesis by describing salutogenesis as a model or framework focused on discovering the causes and precursors of health and identifying health or salutary factors. Pathogenesis in a complementary fashion focused on discovering the causes and precursors of disease and identifying disease risk factors. Antonovsky was pessimistic in his approach positing that humans were flawed and therefore susceptible to disease, injury, problems, and entropy or degradation unless they actively pursued a course of action to cause health. The salutogenic approach to health promotion posited that more than prevention efforts were needed to cause health. In contrast, pathogenesis might be considered optimistic because it assumes that humans would be healthy if not for avoidable problems or difficulties. Under this tenet there is no need to act in regard to one's health until some problem occurs. These assumptions lead professionals using pathogenesis to be reactive because they respond to situations that are currently causing or threatening to cause disease or infirmity. The assumption of salutogenesis, that action needs to occur to move the individual toward optimum health, prompts professionals to be proactive because their focus is on creating a new higher state of health than is currently being experienced.[3, 8] Table 1 summarizes the complementary perspectives and assumptions of the salutogenic and pathogenic approaches to health promotion.

Acceptance of the pathogenic model of health by most traditional health professionals has dictated that disease prevention, treatment, and/or management are the paths to better health. Just as common sense tells us that the absence of bad behavior does not indicate the presence of good behavior, research consistently has demonstrated that simply decreasing a negative state does not necessarily increase positive states.[9-11] Health is similar since its presence requires more than just the absence of disease or related risk factors. Halbert Dunn, in his 1961 treatise *High Level Wellness for Man and Society,* described wellness as

positive health, a state that goes beyond simple "unsickness". [12(p.786)] In these efforts, Dunn proposed that wellness or positive health should be a new interdisciplinary axis of health because it was an undeveloped concept. His work laid the foundation for and inspired the development of salutogenesis by suggesting colleagues explore, probe, test, question and develop the concept of wellness.[13] The 1986 World Health Organization's (WHO) Ottawa Charter for Health Promotion described health as a state of positive well being that emphasizes physical capabilities and provides personal and social resources for everyday life.[14] Indeed, WHO's well accepted definition of health seems to identify both positive and negative aspects when it states that health is a complete state of physical, mental, and social well-being and not merely the absence of disease and infirmity.[15] It follows that interventions addressing pathogenic factors should lessen the burden of negative health while those derived from salutogenic approaches expand positive health's potential.

Early salutogenic research has focused on diseases (or pathogenic outcomes) and has not fully embraced salutogenic outcomes such as optimal well-being. For example, Poppius, et al conducted a study that investigated the relationship of Sense of Coherence (SOC) to coronary heart disease. Sense of Coherence (SOC) is a concept that includes the measurable independent variables of meaningfulness, manageability, and comprehensibility that Antonovsky documented to be associated with better health.[16] The SOC 13 and SOC 29 are measurement tools that measure a person's sense of coherence.[17] Popius' research attempted to determine if Antonosky's SOC model could predict or explain better outcomes regarding coronary heart disease among participants in the Helsinki Heart Study. The five-year Helsinki Heart Study (with 3 ½ year follow-up) double blind trial tested drug efficacy with a sample of 4081 asymptomatic men (aged 40-55 years of age) who had high blood cholesterol levels. Their study revealed that those workers with high SOC had approximately half the risk of CHD compared to low SOC individuals.[18] This study demonstrated that positive health characteristics puts one at lower risk for disease but did not document that it resulted in greater positive health because of the pathogenically oriented outcome measures used.

Progression toward Salutogenic Outcomes

The evolved health status of people in the Western world has led to good health becoming an expectation or entitlement. In the past, avoiding disease was seen as an outgrowth of personal responsibility. Building on Terris's 1972 description of a second revolution in health,[19] Breslow's 2006 American Journal of Public Health (AJPH) editorial suggests that the country is now in the third era of public health (the first era involved combating communicable disease, the second dealing with chronic disease) in which developing and maintaining health is the primary focus since health provides a person the potential to have the opportunity and ability to move toward the life he or she wants. To facilitate management of health in the first two eras, measurement of the signs, symptoms and associated risks of disease and infirmity were of paramount importance.[20] In the third era of public health most people expect a state of health that enables them to do what they want in life. To facilitate management of an evolved health status, it is necessary to develop new health measures that will quantify positive health or health potential.[21, 22] These measures must go beyond detecting pathogenesis and its precursors to measuring those qualities associated with better health.

Antonovsky believed that salutogenesis should be the theoretical basis for developing, testing, and implementing plans and practices that enhance health and well-being. Specifically, he offered three ways to do this: (1) look at the data differently: instead of looking at those who have succumbed to a problem to find out why, look at those who are succeeding and try to find out why they are doing well; (2) persuade practitioners and researchers to ask about the factors related to success, not just factors related to problems; and finally (3) stimulate the formation of unique hypotheses generated to explain desired outcomes. Results from studies and practices that promote and develop positive health outcomes could then be the recommendations.[23]

In the mid 1990's Charlton and White[24] worked to develop what they proposed would be a salutogenic measurement of margin to explain the disparities in health among people from different socioeconomic groups. They defined *margin* to be the availability of resources left after basic needs were met. They hypothesized that increasing the *margin* would lead to increased health promoting behaviors, increased avoidance of health risks, and access to health care.

However, because pathogenic outcomes were used, their study can only rightly be used to infer less pathology.

Measuring Salutogenic Outcomes

In many ways, the work done has begun to deliver on the original promises proposed by salutogenesis. Research done by Antonovsky has generated some valid and reliable measurement tools (SOC 13 and SOC 19) to help answer questions about factors that increase a person's health potential and help people toward greater health.[6, 7, 25] He promoted SOC as a path to better health but he regularly reminded people that SOC was but one idea to answer the salutogenic question.[3]

Other instruments that may have utility in measuring salutogenic effects include the Adams unidimensional Perceived Wellness Scale (PWS) that measures wellness perceptions[26] and Susan Noble Walker's Health Promoting Lifestyle Profile (HPLPII) that measures medically recommended positive health actions.[27, 28] Additionally, Keyes[29] developed the Mental Health Continuum (MHC) tool to measure a positive mental state he categorized as flourishing and a negative state he categorized as languishing. In studies using the MHC, it was documented that those categorized as flourishing had the least number of limitations, fewest missed days of work or cutbacks, and higher psychosocial functioning. However, to date, because the pathogenic framework dominates, outcome measurements only document the absence of pathology or progress toward healing and cure. Salutogenesis work however, should develop, measure, and document practices that move people toward higher level health or optimization.

Optimization

Many studies have documented the benefits of minimizing negative health.[22, 30, 31] The next evolutionary step for salutogenesis should be toward optimization. Optimization refers to the most favorable relative conditions that facilitate measurable growth and success. Optimization work in health would focus on determining and creating the most favorable conditions and factors responsible for measurable positive outcomes such as high levels of performance. Measurement of salutogenic outcomes will require the assessment of progress toward reaching human potential.

Consistent with this evolved understanding of salutogenesis is the idea of continuous improvement. The progress principle explains that the highest levels of satisfaction come from making progress toward rather than achieving goals because of how we adapt to good or bad outcomes. In addition, the adaptation principle explains that humans adapt quickly to improved or worsening life conditions. This is demonstrated by the fact that life satisfaction tends to return to baseline levels within a year after both very positive (i.e. winning the lottery) and very negative (i.e. becoming paraplegic) events. After adaptation to the new condition, results document that people's satisfaction level returns to baseline or where it was prior to the momentous event.[32] These principles infer the need to strive for continuous improvement because working toward and making progress toward a higher level of well-being will lead to optimization.

With these principles in mind, another measurement tool designed to answer the optimization salutogenic question was the multidimensional Salutogenic Wellness Promotion Scale (SWPS). The SWPS is a validated, comprehensive tool designed to measure health promoting actions in the physical, social, emotional, spiritual, intellectual, vocational, and environmental dimensions. The SWPS has been used in studies that seek to determine factors associated with optimization. These studies have shown statistically significant gains in perceived health, life satisfaction, and job performance were positively correlated the number of health promoting actions with which participants chose to engage. These studies also have documented that those who engage in a greater number of health promoting behaviors have lower levels of disease, depression, and symptoms.[30]

To fully test the salutogenic model as philosophically intended the outcomes of research should be designed to determine factors related to optimization. Each study would need to operationalize relative optimization. For instance, one study was designed to find factors related to top performers at a large university using the SWPS. Top performers were operationally defined to be those who had high Grade Point Average (GPA) and high health status. The results of this study documented that students with the highest perceived health engaged in significantly more health promoting physical activity and nutrition behaviors as well as being the ones who exhibited greater amounts of health promoting emotional management behaviors. This study also found that those who found their academic work inspiring, important, enjoyable, and meaningful had the highest GPAs.[33]

More valid and reliable scientific studies aimed at investigating causes of optimal performance are needed. Existing positive health tools can be used to facilitate this research if studies are designed to investigate top achievers or those that perform or attain an optimal level. The development of more positive measurements could facilitate the documentation of gains in multiple areas that will help build a science of positive public health.[22] Thinking salutogenically will require us to primarily focus on factors that produce, not just simple survival, but the best outcomes.[32, 34, 35] There are multiple ways to facilitate higher levels of physical, social, and mental well being that are more than the absence of disease and researchers must use scientific rigor to design, develop, and determine optimal outcomes.

To integrate the salutogenesis into practice, many opportunities exist. The authors believe an important strategic step would be to add the concepts of positive health and salutogenesis to the curriculums and textbooks used to train health professionals. Other strategic moves could be to put salutogenesis in national health models like Europe did with the EUHPID Health Development Model,[36] develop and implement trainings to educate staff and patients about salutogenesis and its benefits, and encourage academic and professional groups to investigate, research, test and write about effective salutogenesis practices.

Conclusions & Implications

Salutogenesis presumes disease and infirmity are not only possible but likely because humans are flawed and subject to entropy. According to a salutogenic perspective, each person should engage in health promoting actions to cause health while they secondarily benefit from the prevention of disease and infirmity. Pathogenesis, on the other hand in a complementary fashion primarily focuses on prevention of disease and infirmity, with a secondary benefit of health promotion. Both models assume if the primary focus is attained, the secondary purpose will follow.[3, 4]

While one approach is not more important than the other; both are needed to facilitate the goal of better health and a safer and more health enhancing environment. The time has come for more salutogenic thinking, research, and practices. Pathogenesis improves health by decreasing disease and infirmity and salutogenesis enhances health by improving physical, mental, and social well-being. Together, these strategies will work to create an environment that nurtures, supports, and facilitates optimal well-being.

To refine and operationalize salutogenesis as the scientific model for positive health that Antonovsky envisioned,[3] the focus must be to develop approach strategies[37] and environments that improve or enhance health potential by facilitating measurable gains and growth related to optimization. Efforts to rebuild the current U.S. illness care system into a more effective and efficient health care system would be enhanced by including salutogenic approaches. Europe has taken this step already as David Byrne, European Commissioner for Health and Consumer Protection, has declared, "The time has come for a change in emphasis from treating ill health to promoting good health."[38] Using salutogenesis could provide the underlying framework for a redesigned health care system that starts by thinking about the causes and precursors to physical, mental, and social well-being.

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Table 1. Complementary Perspectives on Health

Pathogenesis	***Salutogenesis***
Start Point = Disease or Problem	Start Point = Health Potential
About avoiding problems and its causes	About approaching potential and its causes
Works to eliminate risk factors	Works to create health (salutary) factors
Reactive - react to signs, symptoms, and indications of disease	Proactive - create conditions of physical, mental, and social well-being
Disease or infirmity is an anomaly	Humans flawed and subject to entropy
Idealistic perspective - treat disease	Realistic perspective - go get health
Focus is to prevent pain or loss	Focus is to promote gains or growth
Prepares or help prepare one to live	Enhance capacities and potential so can live fully
Wants to help avoid or prevent a person from being pushed backward	Wants to help or enhance a persons ability to move forward
Against Disease and infirmity	For Health
For those who need healing cures	For those who want better health
Primary focus - Prevention of negative health	Primary focus - Promotion of positive health
Secondary benefit - Health Promotion	Secondary benefit - Prevention of disease and infirmity
Outcome - absence of problem	Outcome - presence of a gain
Keep from making situation worse	Continuous Improvement
Minimization of problems	Optimization of potential