

A salutogenic approach to oral health promotion

Uma abordagem salutogênica à promoção da saúde bucal

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Abstract

Theoretical frameworks on health promotion focusing on social determinants of oral health have highlighted promising approaches for improving the oral health of populations and reducing inequities in oral health. In the last two decades the salutogenic theory has gained ground in the field of health promotion, but not in oral health promotion. Instead of focusing on risk factors and behavior change, the theory highlights the importance of resources and the ability to use them. The model's central construct, sense of coherence (SOC), suggests explanations of the relationship between life stressors and health status. The stronger the SOC, the more successfully people will cope with stressors and thus maintain their health. This paper discusses the potential of the salutogenic theory to guide the development of actions in the five fields of oral health promotion: creating supportive environments; promoting health through public policy; strengthening community action; developing personal skills; and reorienting health services. The theory can serve as a framework for oral health promotion measures that strengthen the available resources, create better ones, and enable people to identify and benefit from them.

Health Promotion; Oral Health; Social Conditions

Introduction

Oral diseases are public health problems because of their extensive prevalence and the high costs of providing oral health services ¹. Oral health affects general health and has impacts on quality of life ^{2,3}. To reduce oral diseases, most programs use the conventional dominant health education model ⁴. Many health education interventions, influenced by health behavior research, are based on psychological models developed to explain individual lifestyles ⁵. There are serious limitations to these approaches for producing sustained improvements in oral health ^{6,7,8}. Many of them stress lifestyle and behavioral change and fail to emphasize the social, environmental, and political determinants of health ^{9,10}. The importance of developing approaches that explain individual and group behavior in the context of wider social structures has already been addressed ^{11,12}.

A recent shift has taken place in public health and oral health promotion approaches, focusing on social and environmental determinants of health that are likely to improve oral health of individuals and populations ^{12,13}. These broader approaches use information from social capital and the salutogenic model. Their relevance to dental public health was confirmed by epidemiological studies ^{14,15,16}.

Watt ¹⁷ has highlighted the potential value of these contemporary theories for oral health

promotion. Among the theoretical frameworks, salutogenesis deserves special attention because it focuses more on people's resources and capacity to promote health than the classic focus on understanding the nature of disease and its associated risk behaviors^{18,19}.

According to the salutogenic model, people are located on a continuum where *health-ease* and *dis-ease* are the two poles of the axis. The central idea of salutogenesis is the *sense of coherence* (SOC) concept, which reflects a person's view of life and capacity to respond to stressful situations in a health-promoting manner. Salutogenesis is a promising approach to oral health promotion for four reasons. The theory challenges the pathogenic approach, since it focuses on pathways and mechanisms leading to health²⁰; it addresses the "upstream" underlying social determinants of population oral health, instead of focusing mainly on changing health behaviors. In addition, to reduce oral health inequities, the salutogenic orientation seems to be a promising framework for interventions based on an understanding of what sustains health in conditions of chronic adversity²¹. Finally, in a challenging global world, the way people are able to perceive structures, create coherence and keep everything together has a central impact on health²².

Salutogenesis is a well-established concept in public health and health promotion. The implementation of the theory in general public health practice includes: applying its principles in healthy public policies; including the SOC in health indicator systems; and using the perspective and the SOC instrument in interventions and group and individual treatments²³. Although the theory is well established in general health, the fundamental principles of the theory and their implications for oral health promotion has not been discussed thus far.

The aim of this paper is to discuss the salutogenic theory and its application to oral health promotion strategies in the five fields of oral health promotion, namely creating supportive environments, promoting health through public policy, strengthening community action, developing personal skills and reorienting health services. The rationale used to guide the suggestions made in this paper is Antonovsky's work on salutogenic theory and epidemiological studies that assessed the association between SOC and health. The health promotion concept adopted in this text is derived from the Ottawa Charter²⁴.

The salutogenic model

The concept of salutogenesis (*saluto* = health; *genesis* = origin) was proposed in 1979 by Antonovsky²⁰. The theory seeks to explain that factors that promote health are different from those that modify the risk for specific diseases. The focus of the concept is the maintenance or improvement of locating people on a *health-ease/dis-ease* continuum rather than the dichotomy between health and disease²⁰. The theory considers that diseases and the stressors are inherent to the human condition and that the stronger the SOC of individuals and groups, the more adequately they cope with those conditions and, therefore, maintain health. The SOC is a universal concept relevant to both genders and all ethnic groups, social classes, and cultures. It does not refer to a specific coping strategy, but to factors that, in all cultures, are always the basis for coping with stressors²⁵.

The interest in the mechanisms of salutogenesis began when Antonovsky developed research on adaptation to menopause experienced by a group of Israeli women who were concentration camp survivors during World War II. Although they had experienced highly stressful situations, many women remained healthy and did not manifest the common menopausal symptoms²⁶. According to Antonovsky²⁷, the reason for keeping themselves in good health was related to the way those women saw life and the essence of their existences. According to Antonovsky's original idea, it is more important to focus on resources and the capacity to generate health – salutogenesis – than on the causes of the disease – pathogenesis²⁷. Thus, the concept is capable of explaining why individuals, despite difficult and stressful situations, maintain good health. The theory can be applied at individual, group, and society levels^{20,27}. The salutogenic theory takes into account the individual aspects and the interaction among people and social structures, i.e., the human resources and contextual life conditions^{20,27}.

The key components of the salutogenic theory are: (1) problem-solving orientation and (2) the capacity to use available resources.

The sense of coherence concept

A fundamental concept of the salutogenic theory concerns the SOC. This concept, in fact, corresponds to the way the salutogenic theory is operationalized. SOC reflects a person's life view and capacity to respond to stressful situations^{19,20}. SOC consists of a global orientation to view

life as structured, manageable, meaningful, or coherent. It is a personal way of thinking, being, and acting with an inner trust that leads people to identify, benefit, use, and reuse the resources at their disposal^{19,20,27}. SOC has three components: (1) comprehensibility (cognitive component), referring to the extent to which a person perceives the stimuli that confront them as making cognitive sense, as information, that is ordered, consistent, and structured; (2) manageability (instrumental/behavioral component), or the extent to which individuals perceive they are able to manage the situation on their own or through significant others in their social network; and (3) meaningfulness (motivational component), or the extent to which a person feels that life makes sense emotionally^{20,27}. Therefore, SOC relates to the way individuals make sense of the world, use the required resources to respond to demands, and feel that these responses are meaningful and make sense emotionally. Seeing the world as comprehensible, manageable and meaningful would facilitate the selection of resources and behaviors that are culturally appropriate and efficient for achieving health²⁸.

The resources used to respond to stimuli are called "general resistance resources". These resources are essential to the movement toward health promotion and are classified as biological, material and psychosocial. General resistance resources are shaped by life experiences characterized by consistency, participation in shaping outcome, and the balance between underload and overload. Thus, when these resources are available or in the immediate surroundings, the person has a better chance of dealing with life's challenges²⁷. Typical general resistance resources are financial resources, knowledge/intelligence, experience, self-esteem, healthy behavior, commitment, social support, cultural capital, traditions, religion/philosophy/art, and preventive guidance in health²⁹. However, the essential aspect of general resistance resources is not the availability of resources, but also each individual's ability to use his or her GRR for the intended purpose, which is based on the SOC^{20,27}. So, people with a strong SOC are more likely to identify a wider range of available resources²⁵.

SOC is essentially structural, since general resistance resources may be internal resources and also be present in the social environment, being material or non-material in nature. Differences in SOC levels are affected by an individual's position in the social structure, since differences among social classes, ethnic groups, genders, and occupations can influence life experiences²⁸.

It is believed that individuals develop their SOC throughout life, although most SOC is developed in the first decades of life. Moreover, SOC can be shaped and manipulated by health promotion interventions, moving people toward the health pole of the continuum¹⁸.

Sense of coherence and health

There is good evidence that SOC is a resource capable of promoting health, strengthening resilience, and developing a subjectively positive state of health³⁰. SOC has also been associated with quality of life^{23,31,32}. The relationship between SOC and other constructs like well-being³³, risk behaviors, and social support²⁵ has already been demonstrated.

A systematic review found that SOC was strongly related to perceived health, especially mental health. This relation is manifested in study populations regardless of age, gender, ethnicity, nationality, and study design³⁰. Cross-sectional studies in Finland³⁴, Sweden³⁵, and Canada³⁶ showed a positive association between strong SOC and good self-perception of health. Stronger SOC correlated with fewer subjective complaints and symptoms of illness.

There is also a relationship between SOC and cardiovascular disease. The results of a prospective study showed that in the white-collar working environment the incidence of coronary heart disease was lower in individuals with strong SOC. However, a similar effect was not observed in blue-collar workers³⁷. A longitudinal study in the United Kingdom showed that strong SOC was associated with a 30% reduction in all-cause mortality after adjusting for social class and several risk factors. It was suggested that strong SOC confers some resilience to the risk of chronic diseases³⁸. Despite these favorable results, a recent systematic review on the relationship between SOC and physical health revealed that this relationship is complex. The relationship for physical health also appears to be weaker than between SOC and mental health³⁰.

An association between SOC and oral health has already been found. Strong SOC in adolescents was associated with lower odds of experiencing caries in anterior teeth³⁹. Significant inverse associations were also found between mothers' SOC and children's levels of dental caries and gingival bleeding¹⁵. Other studies have shown a positive relationship between strong SOC and oral health related-quality of life⁴⁰, frequency of tooth brushing⁴¹, as well as pattern and frequency of dental attendance^{39,42}. Furthermore, SOC was related to functional status

in a group of patients that received surgical treatment for oral or pharyngeal cancer. Stronger SOC correlated with less functional impairment⁴³. However, the relationship between oral cancer and SOC has not been substantiated⁴⁴.

It is apparent that the salutogenic theory has served as a theoretical framework in different studies on health. While most of the studies focused on verifying the possible association between SOC and health, the theory's underlying framework and the implications for oral health promotion have not been discussed thus far.

Salutogenesis and oral health promotion

Contemporary health promotion originates from a wider concept of the health-disease process and its determinants. According to the Ottawa Charter²⁴, health is a result of several factors related to quality of life, including adequate conditions of diet and nutrition, work, education, housing and sanitation, healthy physical environment, and social support for families and individuals. Health is no longer seen as an end but as a resource on both the individual and societal levels. The Ottawa Charter also highlights the importance of adopting a responsible lifestyle and attention and care for health²⁴.

In oral health, current health promotion approaches have shown promising outcomes for improving oral health, mainly in relation to dental caries and traumatic dental injuries, starting with the recognition that caries development is socially determined^{4,45,46}.

Protective factors related to oral health are low consumption of non-milk extrinsic sugars, effective dental plaque control, adequate exposure to fluorides, appropriate use of dental services, no alcohol abuse, and no tobacco consumption. Although most can be modified at the individual level, they are strongly influenced by complex sociopolitical factors that are beyond the control of many people¹².

A wider concept of health and its determinants are also central to the salutogenic theory. The theory challenges the false dichotomy between health and disease by identifying continuity between them, the so-called *health-ease/dis-ease* continuum. In this sense, according to salutogenesis, factors that promote oral health are different from those that generate diseases. Therefore, moving a person towards the direction of the health pole does not necessarily imply low exposure to risk factors for oral diseases. This is in accordance with the fact that for a person to be healthy, the absence of illness or no exposure to risk factors is neither necessary nor

sufficient⁴⁷. Even when exposed to risk factors for oral disease, individuals can keep healthy, since they are able to control their lives.

The process of enabling people to increase control over their lives in order to live a good life is an important strategy proposed by contemporary health promotion²⁴. Thus the focus of oral health promotion is on the ability of individuals to deal with their own problems and improve their health. The salutogenesis approach harmonizes well with this process since it is focused on a resource (SOC) that enables people to manage tension, to identify and mobilize the health resources to promote effective coping by finding solutions in a health promotion manner³⁰. SOC is positively associated with individuals' control over the determinants of health, and strong SOC facilitates the selection of culturally appropriate and efficacious resources and behaviors²⁸.

The perspective of oral health promotion concerning effective actions in health involves "making healthy choices the easiest choices" through modification of environments and policies that enables people to have opportunities to choose a healthier lifestyle⁴⁸. This idea addresses the need to strengthen and create resources that help people construct coherent life experiences and generates oral health-promoting abilities that lead to an active and productive life.

The responsibility of oral health promotion goes beyond the health sector and health behavior to well-being and quality of life. The objective of oral health promotion is to generate prerequisites for good health that are an important dimension of quality of life²⁴. There is a positive relationship between SOC and general (and oral) health-related quality of life^{23,40}. Moreover, there is an association between the construct and perceived health. Therefore, SOC can be considered a stress-resisting resource, providing prerequisites for a good life²³.

The salutogenic theory also involves the idea of joint responsibility for problems and proposed solutions to them because it considers that individual aspects and the social environment are both determinants of the SOC.

Using the salutogenic approach in oral health promotion

The Ottawa Charter²⁴ outlines five priority action areas for health promotion: creating supportive environments, promoting health through public policy, strengthening community action, developing personal skills, and re-orienting health services. Using the salutogenic

theory, the five Ottawa Charter health promotion areas of action are applied to oral health promotion below.

Creating supportive environments

Considering the impact of the environment on health, several actions of oral health promotion that aim to create salutogenic factors can be developed in different places where people live, study, and work. These include increased availability of sugar-free beverages and snacks at affordable prices, psychological support from family and friends, and reduction of anxiety⁴⁹.

The salutogenic perspective helps identify resources that generate living and working conditions that are safe, stimulating, and enjoyable and favor oral health. The availability of these factors affects individuals' choices to adopt healthy behaviors. When those resources are extended, the possibility of adopting healthy choices is consequently expanded.

However, the increase in such resources does not necessarily imply a reinforcement of SOC, because individuals need to be informed and encouraged so that they can feel competent and empowered to deal with factors influencing their oral health.

Promoting health through public policy

Public policies that aim to improve individuals' oral health using a population strategy of prevention can be considered a salutogenic approach. The population strategy of prevention starts with the recognition that the occurrence of common diseases and exposures reflects the behavior and circumstances of society as a whole⁵⁰. Public policies that make healthy choices feasible are also easier for communities to adopt^{12,51,52}. Some of these policies are highlighted here: (1) controlling production of processed foods and drinks with sugar added as well as support for the production and distribution of traditional foods at the local and national levels; (2) discouraging sugar production and incentives to replace sugars with healthier products; (3) removing non-milk extrinsic sugars from children's food and drinks and pediatric medications; (4) controlling advertisements on children's food; (5) supporting tax exemptions on toothbrushes and fluoride toothpastes; (6) supporting legislation on water fluoridation; and (7) encouraging schools to join the Health-Promoting Schools Network.

The framework of health-promoting schools represents an effective opportunity to generate oral health. Salutogenesis can serve as a theo-

retical foundation for health-promoting schools, integrating oral health into the school curriculum in a coherent way, thus facilitating the learning process and generating positive impacts on health and well-being. School-based programs can enhance the health and well-being of school staff, families, and community members²⁴. These health-promoting schools constantly strengthen their capacity as a healthy setting for living, learning, and working⁵³. School health policies can address oral health issues and resources that promote health⁵⁴. Some of these policies include: (1) a caring and respectful psychosocial environment; (2) a ban on the sale of unhealthy or harmful foods and substances in the close vicinity of the school environment; (3) a ban on alcohol consumption and smoking on school premises; and (4) supervised daily tooth-brushing drills.

All of these policies enhance the availability of resources that generate oral health and can provide impressive improvements in health and well-being. Additionally, it is critical to focus action on decision-makers and influential individuals in the local community, like working with school directors, local politicians, and community representatives in order to achieve significant and sustainable change⁴.

Strengthening community action

The involvement of local communities with the aim of gaining control over their own health highlights the whole-population approach to health promotion⁵⁵. Individual and community empowerment in setting priorities, making decisions, planning, and implementing strategies is crucial to improve health and well-being. Control over one's own life from a community empowerment perspective includes the acquisition of individual competences (e.g. development of confidence and self-esteem), critical analysis of the social and political environment, and the development of collective resources for social and political action to achieve better health⁵⁶. In this sense, strategies that seek to strengthen social networks, stimulating the formation of alliances between oral health professionals and communitarian activists, groups, and institutions responsible for the promotion of community health can be highlighted. The salutogenic approach encourages full participation by local communities in the health development process, since the theory emphasizes positive capability to jointly identify problems and active solutions, promoting self-esteem of individuals and communities. This perspective can lead to an increase in the amount and distribution of

protective/promoting factors that are assets for individual and community health⁵⁷.

Developing personal skills

The role of oral health professionals is to enable people to make sound choices. Oral health workers are expected to act as a catalyst for health promotion action by providing access to information on health, by facilitating skills development⁵⁸.

However, even if environments are supportive, making healthy choices will be difficult if people do not feel control over their personal circumstances. Control reflects the process by which people gain mastery over decisions and actions that affect their health. It reflects the availability of resources (instructions on how to perform) and the learned ability to use them (increased confidence and feeling of mastery)⁵⁹. Empowerment is closely related to control over one's life. By providing people with access to health information and their capacity to use it in a critical way, oral health professionals can facilitate the empowerment process. Health education should be based on dialogue, involving people in their own life circumstances. The education process is also facilitated when information is structured, comprehensible, and thus meaningful. The salutogenic framework facilitates the learning process while simultaneously promoting health²³.

Therefore, oral health education activities should be capable of promoting understanding, by helping individuals to identify harmful health-related beliefs, encourage self-examination of the mouth to detect problems, and encourage lifestyle changes⁶⁰. In addition, it is important to make individuals aware of the importance of fluoride toothpaste and the fluoridated water supply as well as oral hygiene procedures. In order to facilitate the empowerment process, the relationship between oral health professionals and clients must be seen as a partnership, rather than the traditional hierarchical health care provider-health care receiver relationship.

However, it is important to note that the concept of "empowered person" must take into account the political and historical context in which people live, as well as the limited control that many subjects have over decisions and actions that affect their health²¹. As Watt⁴ (p. 713) stated: "*Health knowledge and awareness are of little value when resources and opportunities to change do not exist*".

Reorienting health services

The adoption of the salutogenic theory in health services implies the re-direction of health facilities' actions and services. Apart from conventional procedures like the identification of risk factors and provision of treatment, oral health services can also offer services directed to the identification and generation of people's resources, which in turn can improve people's health. The oral health service has to be considered a general resistance resource directed to bringing community and oral health professionals closer together through appropriate practices of cooperativeness and fostering links between them.

In addition, community participation is essential in the decision-making process and planning and implementing strategies in the dental services⁴. The establishment of alliances between dental services and different settings for oral health promotion, like schools and workplaces, in partnership with the food industry, merchants, and manufacturers, is also essential for achieving better oral health at the community level^{4,49}.

Besides directing attention mainly to people who are at higher risk for specific diseases, the appropriate strategies in oral health promotion should adopt a whole-population approach, which involves all the population and takes the context of people's lives into account⁶¹. According to salutogenesis, all individuals are found in a *health-ease-dis-ease continuum*, thus justifying the need to adopt a population strategy together with actions focused on high-risk subjects.

A salutogenic perspective also supports the common risk approach, since this strategy focuses on coherence between health promotion actions, integrating general and oral health. The common risk approach recognizes that chronic non-communicable diseases such as obesity, heart disease, stroke, cancer, diabetes, mental illness, and oral disease share a set of common risk conditions and factors¹³. Improvements in a range of chronic conditions could be achieved more efficiently and effectively.

Concluding remarks

Salutogenesis is a promising concept to apply to oral health promotion, since the theory focuses on both individual and social environmental factors, rather than exclusively on risk factors and changing health behaviors. The salutogenic approach suggests the importance of considering context and meaning when seeking to understand adaptation and life orientation. Therefore, the theory can guide the understanding of the

various life choices that people make and the pathways they pursue⁶².

Empowerment of people to gain greater control over life and achieve their full health potential is an important strategy for health promotion. Empowerment is closely related to the theory of successful coping proposed by Antonovsky⁵⁹. Salutogenesis focuses on the development of abilities that enable people to deal effectively with the demands and challenges of everyday life and thus maintain and improve their health. The theory can serve as a theoretical framework for oral health promotion actions that aim to foster people's ability to control health determinants through individual and community empowerment and by increasing internal and external salutogenic resources.

In a global world characterized by rapid social changes, salutogenesis can also guide an understanding of the ways individuals and groups perceive their lives as structured, comprehensible, and meaningful, use their internal and external resources to change or cope with the environment in a (general and oral) health-promoting way.

Oral health in public health has traditionally focused on gathering evidence focused on identifying problems and needs of populations, leading to policy development that emphasizes the failure of individuals and local communities to avoid oral disease. This perspective is necessary to identify needs and priorities, but it should

be complemented by the more resourceful approach proposed by salutogenesis⁵⁷. The theory can guide the development of evidence focused on life choices and exploration of factors that generate oral health and foster a fuller life experience. Oral health epidemiology should identify the resources for health and development at each of the key life stages – factors that make us more able to cope in times of stress – and investigate the links between these resources and a range of oral health outcomes. Salutogenesis can further explain the persistence of oral health inequities and promote a more resourceful approach to tackling them.

It is essential to strengthen the available general resistance resources, to create better ones, and to enable people to identify and benefit from them. Although salutogenesis is focused on resources and people's capacity to tap solutions in their lives and under adversity, it does not mean that material deprivation and divisions are irrelevant. A more egalitarian society is one that maximizes the resources and capabilities of all citizens. At the macro level, the main challenges are the development of a salutogenic healthy public policy – required to build and sustain the resources that generate health – and the construction of the coherence needed to create a health-promoting society²³. The application of the salutogenic framework in practice can contribute to the improvement of general and oral health.

Resumo

Os referenciais teóricos para a promoção da saúde que priorizam os determinantes sociais da saúde bucal têm destacado abordagens promissoras para melhorar a saúde bucal das populações e reduzir as iniquidades em saúde bucal. Nas duas últimas décadas, a teoria salutogênica tem merecido destaque no campo da promoção da saúde geral, mas não especificamente na promoção da saúde bucal. Ao invés de priorizar fatores de risco e mudanças comportamentais, a teoria destaca a importância dos recursos e da capacidade de utilizá-los. O constructo central do modelo, chamado senso de coerência (SOC), sugere explicações para a relação entre estressores e status de saúde. Quanto mais elevado o SOC, maior a capacidade dos indivíduos para lidar com os estressores e, portanto, manter a própria saúde. O artigo discute o potencial da teoria salutogênica no sentido de orientar o desenvolvimento de ações nos cinco campos da promoção da saúde bucal: criação de ambientes favoráveis à saúde; elaboração e implementação de políticas públicas saudáveis; fortalecimento da ação comunitária; desenvolvimento de habilidades pessoais e reorientação dos serviços de saúde. A teoria pode servir como referencial teórico para o desenvolvimento de ações de promoção da saúde bucal que objetivem fortalecer os recursos disponíveis, criar outros melhores e permitir que as pessoas os identifiquem e deles possam se beneficiar.

Promoção da Saúde; Saúde Bucal; Condições Sociais

Contributors

A. N. Silva conducted the literature review and designed and wrote the article. M. V. Vettore contributed to the conceptualization, definition of the study objectives, drafting of the article, and revision of the text. M. H. M. Mendonça participated in the definition of the objectives and revision of the text.

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