Health Promotion Conceptual Evolution and Program development: a Literature Review

José Félix[1,2,3], **Paula Clara Santos**[2,4,5], **Pilar Baylina**[3,6,7]

[1] Department of Physics, School of Health of Porto, Polytechnic Institute of Porto, Rua Dr. António Bernardino de Almeida, 400, 4200 - 072, Porto, Portugal

[2] Research Center in Rehabilitation - Center for the Study of Movement and Human Activity, Rua Dr. António Bernardino de Almeida, 400, 4200 - 072, Porto, Portugal

{jmf, pcs}@ess.ipp.pt

[3] LaBMI - Laboratory of Medical and Industrial Biotechnology, Rua Arq Lobão Vital, 172, 4200-374 Porto, Portugal

pbm@ess.ipp.pt

[4] Department of Physiotherapy, School of Health of Porto, Polytechnic Institute of Porto; Rua Dr. António Bernardino de Almeida, 400, 4200 - 072, Porto, Portugal

[5] CIAFEL (Research Center in Physical Activity, health and Leisure), Faculty of Sports, University of Porto and Laboratory for Integrative and Translational Research in Population Health (ITR), Porto, Portugal

[6] Department of Health Management and Administration, School of Health of Porto, Porto Polytechnic Institute; Rua Dr. António Bernardino de Almeida, 400, 4200 - 072, Porto, Portugal

[7] Metabesity group, I3S – Institute for Research and Innovation in Health from University of Porto; Rua Rua Alfredo Allen 208, 4200-135 Porto, Portugal

Abstract. *The World Health Organization defends prevention and health promotion among communities as a driver of economic and social development, where the individual level of health literacy determines health choices such as adopting healthy lifestyles, managing individual healthcare and preventing*

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chronic diseases. Currently, health promotion is guided by a set of values, being these principles essential for identifying needs and priorities, planning, implementing, evaluating and determining the health promotion programs, that can be defined as a set of programmed, integrated and interrelated strategies and actions that aim to promote health, prevent risks, reduce years of life lost due to disability and increase quality of life. There are several models for planning health promotion programs, such as the Precede-Proceed Model, the Multivariate Approach to Community Health (MATCH) Model, the Mapped Intervention Model and the Social Marketing Model. A good planning of a health promotion program can effectively reduce the health costs.

Keywords. Health promotion, health education, prevention, program development, health literacy

1 Prevention and Health Promotion

1.1 Origin and Evolution of health prevention and promotion

The World Health Organization defends prevention and health promotion among communities as a driver of economic and social development, through which it will be possible to improve the level of quality of life using this health method [1]–[6].

Health promotion corresponds to all processes and procedures that aim to improve, individually and in the community, essential capacities for the improvement of health conditions. It is a set of political and social guidelines aimed at the sustainable development of nations. To this end, health promotion is based on enabling individuals to identify, carry out and adapt actions that result in their integral well-being, making them endowed with a good level of health literacy. It is understood as a tool that enables the improvement of quality of life, focusing on the adaptation and implementation of healthier lifestyles. In the first instance, it aims to reduce the costs of treating pathologies, integrating it with primary prevention, being the first means of action in the community[1]–[3], [5]–[10].

Disease prevention has come to be understood not only as prevention but also as the reduction of risk factors inherent to the pathology. However, at the time of the onset of the disease, prevention can be understood as the reduction of the evolution of the consequences. When it comes to chronic diseases, priority is given not only to the prevention of risk factors but also to increase the average life expectancy, in years lived with a level of quality of life [11]–[15].

It is important to highlight that these concepts have evolved since the 1920s when health promotion was considered a concept of preventive medicine at that time. This was defined by some authors as the "effort" of society, in order to achieve policies to improve health conditions, as well as education for the improvement of individual health, aiming at the development of "social machinery" and ensuring all levels of living healthier [16]. Later, Henry Sigerist cited in [17], when presenting the four tasks of medicine, refers and presents for the first time the term health promotion. He considers that health is achieved when the living conditions of the individuals are adequate, indicating to the governments, unions and other sectoral leaders to join efforts to put into practice the perspective presented [16], [18]–[21].

After the Second World War (1939-1945) relationships between health behavior and disease prevention were demonstrated, with various levels of prevention; primary prevention (which aims to promote health and protection, increasing levels of health, centered individually and in the community, pointing to health education and motivation); secondary prevention (early diagnosis and treatment) and tertiary prevention (rehabilitation). In this way, disease prevention created the motto for health promotion, initially understood as a set of actions aimed at changing behaviors, taking into account the family, social and cultural environment [16], [18]–[21].

In 1945, with the creation of the WHO, health is accepted worldwide as a "fundamental and universal right for all", which is why a major restructuring of concerns by countries with a view to health began. This is how investment in public policies and the creation of beneficial

environments for the development of individual and community capacities begin [16], [18]–[21].

Around 1970, the Canadian Minister of Health and Welfare, Marc Laland (1974) sees the diseases of the developed world as a consequence of human behavior, releasing the document "Inform Lalonde". The work presents the costs of health models based on the medical approach to chronic diseases (focusing on determinants in health, human biology, genetics, lifestyle and health care organization)[21].

In 1977, in the Republic of Kazakhstan, in Alma-Ata, one of the most relevant meetings for health takes place, where the Alma-Ata Declaration is launched. Reiterates the creation of Primary Health Care (PHC), as well as the need for the involvement of the community and all social sectors in this new concept that is "health for all"[16], [18]–[20].

In 1986, in Ottawa, the Health Promotion Letter is adopted, which sets the tone for public health through the development of health promotion. In this letter, legal, egalitarian and mediation perspectives are presented for the prerequisites of public health and the definition of health promotion as the "process of empowering the community to act in the improvement of its quality of life and health, including a greater participation in this process". It lists five action axes for health promotion, based on: construction of healthy public policies, creation of favorable environments for health, reinforcement of community action, training of individuals and reorientation of health services, creating the initial concept of health promotion [16], [18]–[20].

In the following years, several meetings and conferences were held to develop and implement the new concept of "health promotion" in order to respond to the guidelines and strategies set out in the Health Promotion Letter. In 1988, in Australia, the Adelaide Conference aimed to identify Healthy Public Policies. Defends the need for the involvement of all social sectors (industry, commerce, education and communication) for economic, social development and health promotion [16], [18]–[20].

In 1991, in Sweden, the Sündsvall Conference tried to create favorable environments for health, presenting the environment as a factor influencing health. It identifies four fundamental environments for health promotion: social environment (cultures and customs that influence health choices); political (with regard to governmental decisions related to health); economic (distribution of resources among different sectors according to importance and relevance, sustainably) and drawing on the knowledge and skills of women in all sectors [16], [18]–[20].

In 1997, the Jakarta Declaration attempted to respond to the challenges of health promotion in the 21st century by highlighting the importance of the community sector and surrounding local power in promoting health. The training of the individual was encouraged for a good management of resources, correct decision-making in health and definition of places that can be useful in the development and implementation of health promotion, namely cities, workplaces, health centers and other services, such as the private sector[16], [18]–[20].

In 2000, the 5th Global Conference on Health Promotion, in Mexico, with the theme "Towards Greater Equity", originated the Ministerial Declaration of Mexico for Health Promotion. The primary strategy in health policies and plans, ensure active participation of

all social sectors, creation of National Plans for Health Promotion and support for research that develops knowledge on priority areas [16], [18]–[20].

In 2005, in the Bangkok Declaration, in addition to reaffirming previously launched perspectives, it presents promotion as a method for individuals to improve control over their health, pointing out strategies for including health promotion in the globalization agenda [16], [18], [20].

In 2009, in Nairobi, the Global Conference on Health Promotion was held, based on the theme "Closing the chasm in the implementation of Health Promotion", identifying health promotion as a tool for reducing inequalities in health and in the economic level. It highlights the potential of health promotion as a tool to revitalize PHC, resorting to health promotion in the globalization agenda and creating action plans adjusted and designed according to observed, felt and evaluated needs in a more cost-effective manner. Multiple strategies were presented, such as: training for health promotion, leadership training and improvement of management performance, strengthening of health promotion in services, health care throughout the entire life cycle, existence of beneficial partnerships between sectors in order to create policies for the implementation and construction of better evidence and community empowerment through capacity building and increasing health literacy [16], [18]–[20], [22].

During 2013, in Helsinki, a conference was held on the theme "Health in All Policies", where the impact of public policies in all sectors that influence health decisions is addressed. It is defined that health is one of the fundamental human rights, being the government and the community responsible for equity, which is an expression of social justice. This conference resulted in the following strategies: political priority for equity in health, acting according to the social determinants of health, existence of resources and infrastructure for the implementation of health, strengthening ministries of health to involve other ministries in health decisions (creation of partnerships), promote the capacity to implement health and evidence on its determinants, carry out audits in health processes, and consequent accountability towards results, increase trust between governments and societies, eradicate conflicts of commercial interests and increase the development, implementation and monitoring of health using health literacy [16], [18]–[20], [22].

In 2016, in the city of Shanghai takes place the Conference with the theme "Health promotion in the objective of sustainable development: Health for all and all for Health". This conference highlights the contributions of health promotion to improving it, reinforcing the impact of health promotion on sustainable development, as well as the presentation of three key concepts for health promotion: "good governance", "healthy cities" and "health literacy". The Shanghai Declaration, addressed to the governments of all nations, is focused on health promotion and indicates twenty "steps" organized around three major areas: "1- Transformation of political orientation; 2- Transform the way of acting; 3- Build capacity for adaptive government" [1]–[6], [21].

It is known that this concept of health promotion is not yet fully implemented worldwide, as well as in all community sectors. However, it is a fundamental strategy in the creation of good levels of health literacy, which will be reflected in choices that can create and develop situations that prevent disease and promote better levels of health. Health becomes an

essential good, related to disease prevention, with a migration from the pathogenic model to the salutogenic model, creator of the concept of health promotion [16], [18].

The individual level of health literacy determines health choices such as adopting healthy lifestyles, managing individual healthcare and preventing chronic diseases. In turn, they directly and indirectly influence health costs and, consequently, the sustainability of the national health system [3], [4], [14], [15], [23]–[26].

1.2 The promotion and education in health

Health promotion has a strong relationship with health education [27]. Health education promotes a wide range of experiences that facilitate the determination of conductive health actions. In this way, it allows individuals new knowledge, attitudes and skills that promote an improvement in the state/level of health. In order to implement these teaching and training methodologies, individual, collective or interactive actions can be carried out, using technological means, achieving behavioral changes, as a result of oral communications, public announcements, webinars, social marketing techniques, private messages or blogs [27].

Nowadays, health promotion can be seen through two perspectives: health education and environmental actions. Health education uses individual and collective strategies in order to be able to observe behavioral changes and the empowerment of individuals. Environmental actions propose strategies applied at political, social, economic, governmental, legal and organizational levels. As a commitment to corporate social responsibility, these types of actions aim at the empowerment of individuals and community for health promotion and increased investment in health by all sectors [27]–[30].

Currently, health promotion is guided by a set of values based on the ecological perspective of health, which has the cultural, economic and social dimension of health determinants, commitment to equality, justice, respect for diversity, sustainability and social participation. These principles are essential for identifying needs and priorities, planning, implementing, evaluating and determining the reliability of solutions for health promotion. [27]–[30].

The Health Development Model (HDM) prioritizes the prevention of risk factors, health promotion and the optimization of individual health development through training for the individual's own health. The perspectives are not only the onset of the disease and the establishment of risk factors, but also the improvement of the quality of life in the long term. It is evident that the realization of health promotion through effective tools and easy access to the whole community, aimed at learning the concepts and essential factors in maintaining a healthy and an adequate lifestyle [27]–[30].

1.3 Health promotion implementation programs

A health promotion program can be defined as a set of programmed, integrated and interrelated strategies and actions that aim to promote health, prevent risks, reduce years of life lost due to disability and increase quality of life [31].

Currently, places where health promotion programs are carried out, such as in the community, health service organizations, workplaces and schools, requiring the creation of programs with strategies and implementation actions. It is essential to have planning, general and specific objectives, evaluation indicators, action strategies and directives that constitute this plan. Studies indicate that a well-planned and implemented programs can promote a return of about $1.88 to $3.92 for every dollar invested, which leads to lower health costs [27], [32], [33].

Health promotion has been focusing on literacy, through patient empowerment, learning to control and obtain gains in their own health, qualifying health management and cost rationalization. In order to support the program's methodology, theoretical approaches are needed. For this purpose, there are currently several theoretical levels to be taken into account in the construction of programs, such as: intrapersonal level, interpersonal level and community level [27], [31], [32], [34], [35].

The intrapersonal level relies on approaches such as the model of health beliefs - taking into account the individual's beliefs and their influence on health choices; the theory of planned behavior and the theory of rational action - which defend that the behavior of individuals will be dependent on the perception of norms, attitudes and behavior control – and, finally, by the trans-theoretical model and stages of change – presents the stages of behavior change such as pre-contemplation (initiates change thinking throughout 6 months), preparation (starts preparing the change, 1 month), action (change that lasts 6 months) and maintenance (contains the behavior for 6 months to 5 years) [27], [35].

The interpersonal level investigates the theory of social cognition - defines that human behavior is based on the reciprocal determinism between the environment and the individual; the theory of social support and social network - defends the impact of social relationships and networking on mental and physical health [27], [35].

The community level, where the theory of communication is found, emphasizes the power of the media in transmitting a message and producing it. Innovative dissemination models emphasize the use of innovative marketing techniques for the dissemination of messages, and, finally, community mobilization encourages organized activities to verify changes in health outcome [27], [35].

Nevertheless, there are approaches to program design, such as: behavior and lifestyle change, environmental restructuring and development, and a socio-ecological approach [27], [35]

Changing behaviors and lifestyles – an approach that advocates that the programs should focus on disease prevention, replacing unhealthy behavioral patterns (which contribute to the increase in risk factors) with healthy behaviors and habits. This change has been studied and factors that influence it can be pointed out. Social factors, as they shape the way individuals act, choose between options and feel about their health and life. The theory of social influence points out three basic forms of influence: cognitive changes resulting from changes in opinion and beliefs, affective changes and behavioral changes towards those around them [27], [35].

On the other hand, attention should be paid to environmental restructuring and development, where it is considered that the physical environment surrounding individuals

needs to be changed in order to reduce or eradicate toxic or pathological elements leading to pathologies. The geographic, architectural and technological structure are structures that can lead to pathogenic transmission (noise, pollution and social conflicts). This environment can serve as an example for individuals, as well as a provider of quality services that enable them to "promote" their health. As for the environment, issues such as health, industrial and occupational hygiene, environmental health and environmental psychology must be taken into account. Models that take this aspect into account can become more comprehensive, as they can encompass all individuals in a society [27], [35].

Finally, the socio-ecological approach is not based on a perspective, but on a whole paradigm. Here, ecological concerns the study of the interrelationship between the organisms involved in an environment. The physical, social and cultural dimensions, as well as genetic, psychological factors and behavior patterns are considered variables. These influence various outcomes such as physical and emotional well-being and social cohesion and maturation. Thus, this strand emphasizes and prioritizes the interdependence and relationship of the environment with all individual factors [27], [35].

In Fig. 1, some general aspects of each of the approaches are presented [35].

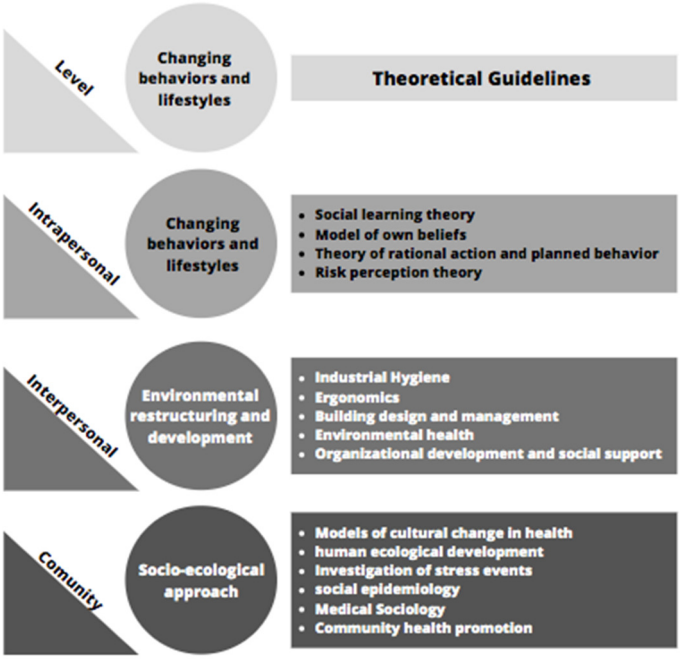


Figure 1. General aspects of approaches

It is also important to understand that each of the approaches will have different health determinants as well as different promotion focuses, and different types of interventions highlighted Fig. 2 [27], [28], [35].

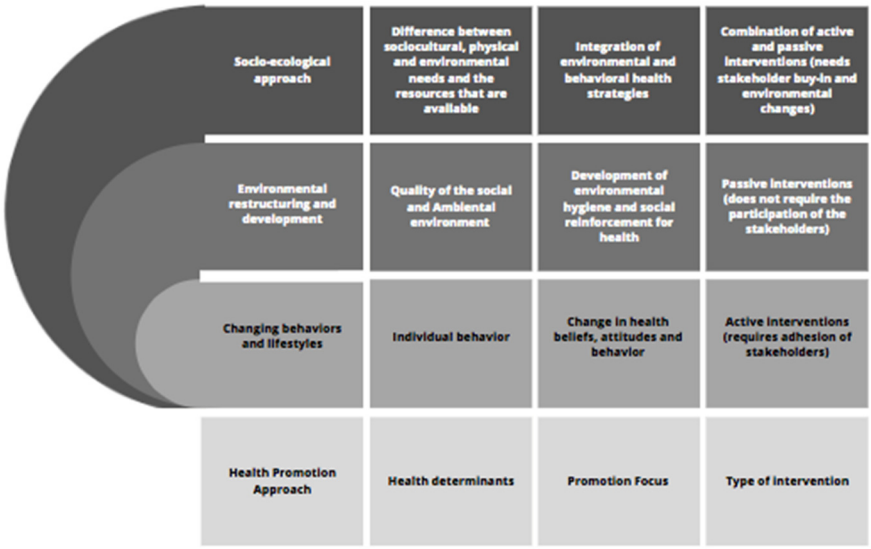


Figure 2. Health determinants, focus and types of intervention according to the approach of health promotion programs

According to the socio-ecological approach, it is necessary to identify various physical and environmental conditions that influence the physical, psycho-emotional and social well-being of individuals. Through a multivariate evaluation it is possible to take into account some principles in the design of health promotion programs. The influence of intrapersonal and environmental conditions on individual and community well-being, such as the development of programs that suit the environment and individuals and, finally, that focus health promotion interventions on behavioral and organizational aspects of great impact. The design of health promotion programs that integrate interdependencies between the physical, social, life domains and multidisciplinary perspectives that use different methods to measure the scientific and social validity of different interventions[27], [35].

The construction of a health program, in addition to presenting all the care, levels and approaches previously detailed, must precede a diagnosis of needs achieved through a demographic diagnosis. This can be done through a questionnaire, which easily determines the risk factors. However, the program can also be carried out taking into account an age group or life stages (such as adolescence, young adults, menopause, among others) or predisposition to risk factors [27], [35], [36].

1.4 Steps in building a health promotion program:

For the construction of a health promotion programs there are three essential steps: planning (diagnosis, prioritization of problems), implementation and evaluation [27], [35], [36].

There are several models for planning health promotion programs, such as the Precede-Proceed Model, the Multivariate Approach to Community Health (MATCH) Model, the

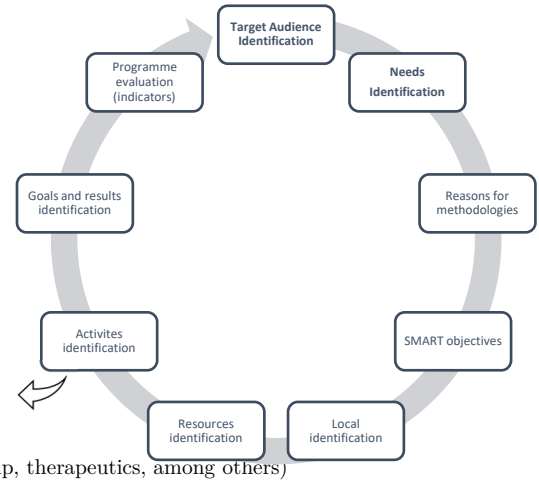
Mapped Intervention Model, the Community Preparedness Model and the Social Marketing Model [27], [37].

The Precede-Proceed Model (Predisposing, Reinforcing and Enabling Constructs in Educational/Ecological Diagnosis and Evaluation and Policy, Regulatory and Organizational Constructs in Educational and Environmental Development) consists of eight phases divided into four initial phases of Precede and four final phases concerning to Proceed. In Precede, the first phase concerns social assessment, in the sense of identifying the level of quality of life through various indicators that influence health. The second phase corresponds to an epidemiological assessment, which makes it possible to identify which health problem reduces the quality of life. In a third phase, an ecological and educational evaluation is carried out and, in the final phase, an administrative and political evaluation and the alignment of the intervention are carried out. In Proceed, phase five refers to program implementation, phase six to evaluation, phase seven to the impact of the evaluation and, conclusively, phase eight presents the results of the evaluation [27], [37].

The MATCH Model consists of five phases, subdivided into multiple steps. The first phase corresponds to the identification of the target, using a social assessment in health and epidemiology. The second phase concerns the planning of the intervention through the identification of objectives, approach and strategy. In stage three, the program is developed with a detailed description of all aspects and, in stage four, preparation for implementation. This step includes training professionals and overcoming legal and political issues. In the last and fifth phase, the evaluation of the program planned so far is carried out [27], [37].

In the Mapped Intervention Model, needs are assessed, an evidence-based program is created and its implementation planned. The Community Preparedness Model assesses community tolerance, denial, resistance and plans the program within that variant. Finally, the Social Marketing Model is based on the marketing-mix plan [27], [37].

It is essential to plan the structure of the program and some steps of the planning process can be defined, as presented in Fig. 3 [27], [37].



- Appointments
- Exams
- Speeches
- Groups (self-help, therapeutics, among others)
- Physical activity
- Regular meetings
- Materials used and supplied
- Didactic resources

Figure 3. Planing Process [27], [37].

During the planning and management of health promotion programs, collective factors, as well as intrapersonal factors of the participants, must be taken into account, which are extremely relevant for their effectiveness. In this sense, aspects such as the individual monitoring of participants by the health system, overlapping of drug and unconventional therapies, such as the implementation of treatments without scientific evidence [27], [31].

On the other hand, it must be considered that a fundamental aspect of the program involves the motivation for adherence, allowing these participants to improve their health levels, benefiting their families, since the participant can become active in the workplace, the which reduces economic dependence. Health providers also benefit from the individual's participation in these programs. By not needing to go to the services, or being the recipient of certain health care, there is a reduction in national health expenditures [24], [28].

The construction of health promotion programs involves the identification of relevant aspects that are good intermediaries in the implementation of interventions, the combination of individual and environmental factors and the measurement of the sustainability of the program and its results. The ecological vision allows establishing fundamental constructs in the design of health promotion programs, aimed at maximizing the benefits for health, economy and society [27], [35], [37].

Table 1 presents a summary of strategies, approaches and theories used in planning health promotion programs [27].

Table 1. Strategy and levels of action and useful theories [27] .

Approach	Strategies	Level of Performance	Useful Theories
Changing behaviors and lifestyles	Educational sessions; Brochures Social marketing campaigns Mentoring Programs; Definition of objectives; Increase in social networking; New organizational policies; Media campaign; Change in public policies	Individual (intrapersonal)	Health Belief Model Theory of Planned Behavior and Rational Action Trans-theoretical Model
Environmental restructuring and development		Interpersonal	Cognition social Theory Social support and social networking theory
Socio-ecological approach		Community	Communication theory Diffusion of Innovative Models Community Mobilization

1.5 Economic impact of health promotion programs

Currently, there is a wide variety of ways to indicate and evaluate costs and economic variables related to health promotion programs [33]. Recent studies indicate that the organization of health promotion programs may have a Return-on-Investment rate of 3.27$, and will provoque a rate of 2.73$ for absenteeism [33]. It is indicated that, when compared to conventional treatment, these programs end up being less cost-effective. We can conclude, based on these data, that prevention and health promotion can generate high levels of quality in health at a reduced cost [38].

One of the most relevant aspects to be indicated by the implementation of health promotion programs is the reduction of the use of consultation and the consequent reduction of costs. However, there may be an increase in health costs if users resort to complementary means of diagnosis, as they become more "active" in their own health, carrying out early screening [39].

As mentioned earlier, one of the major axes developed in health promotion programs is health literacy. This concept directly influences the level of acuity in their lifelong decisions and health choices. In view of this, the higher the level of health literacy is, better the health choices, removal of risk factors, understanding of health information and, consequently, the lower the expenditure on treatment of disease(s) or hospitalizations [40].

Program planning requires various resources, from human, material and financial. All materials needed throughout the program, human resources and the cost associated with its intervention must be accounted for, as well as all the financial investment necessary for its implementation. A study developed by Hatziandreu, et al (1988) [41] accounts for the direct and indirect costs of a health promotion program using physical activity (PA). In direct costs, all materials used for the practice of PA are considered, while in indirect costs, the monetary units lost for the time spent in the practice of PA are accounted for. The costs of the professionals who carried out the follow-up of the participants are also added. As a result, the authors indicate that PA, when used as a tool for health promotion, can present a cost of

around 12,500$ for each QALY (quality-adjusted life year) while the treatment of chronic diseases such as coronary heart disease can be around $40,000 for each QALY [41], [42]

An example is the implementation of a health promotion program for chronically ill patients in São Paulo, which managed to reduce health costs by 47.12% compared to previous years [42].

2 Conclusions

Developing a health promotion program is composed of several steps that can be extended over an extensive period of evaluation, to the phase of identification of needs, construction of objectives and finally programming and implementation of the program.

Today, there are several models on which health managers and professionals can base themselves to develop a specific and sensitive program, from the MATCH model to the Precede-Proceed model. All programs aim an assessment of needs to determine the objectives, through which it will be possible to structure objectives and indicators, plan activities to achieve the objectives. The program management component will always aim at an economist view of the program, reducing costs both in its implementation and in the late treatment of risky health behaviors.

The health promotion programs, aimed at reducing risks, promote healthy habits and reduce comorbidities, thus allowing cost reduction for both the patient and the health system.

Based on the exposed, it is possible to conclude that a program requires a wide range of evaluation tasks in order to be able to develop a specific and viable program, with a view to achieving objectives, reducing costs and promoting behavioral changes that are reflected in a better self-management in health.

References

[1] World Health Organization, “Declaration of Alma-Ata International,” *World Health Organization*, no. 1995, p. 662, 2000.

[2] A. Carvalho, “Promoção da saúde : concepções, valores e práticas de estudantes de enfermagem e de outros cursos do ensino superior,” 2007.

[3] R. E. Glasgow, L. M. Klesges, D. A. Dzewaltowski, P. A. Estabrooks, and T. M. Vogt, “Evaluating the impact of health promotion programs: Using the RE-AIM framework to form summary measures for decision making involving complex issues,” *Health Educ Res*, vol. 21, no. 5, pp. 688–694, 2006, doi: 10.1093/her/cyl081.

[4] J. P. Janini, D. Bessler, and A. B. de Vargas, “Educação em saúde e promoção da saúde: impacto na qualidade de vida do idoso,” *Saúde em Debate*, vol. 39, no. 105, pp. 480–490, 2015, doi: 10.1590/0103-110420151050002015.

[5] World Health Organization, "Promoting Health: Guide to National Implementation of the Shanghai Declaration," *9th Global Conference on Health Promotion: Shanghai 21-24 November 2016*, pp. 1–35, 2018.

[6] World Health Organization, "More active people for a healthier world: global action plan on physical activity 2018-2030," 2018, [Online]. Available: https://apps.who.int/iris/bitstream/handle/10665/272722/9789241514187-eng.pdf?ua=1

[7] R. Z. Goetzel and R. J. Ozminkowski, "The health and cost benefits of work site health-promotion programs," *Annu Rev Public Health*, vol. 29, pp. 303–323, 2008, doi: 10.1146/annurev.publhealth.29.020907.090930.

[8] K. R. Pelletier, "A review and analysis of the health and cost-effective outcome studies of comprehensive health promotion and disease prevention programs at the worksite: 1993-1995 Update," *American Journal of Health Promotion*, vol. 10, no. 5, pp. 380–388, 1996, doi: 10.4278/0890-1171-10.5.380.

[9] P. M. Buss, "Promoção da saúde e qualidade de vida," *Cien Saude Colet*, vol. 5, no. 1, pp. 163–177, 2000, doi: 10.1590/s1413-81232000000100014.

[10] R. Mendes *et al.*, "Physical activity promotion tools in the portuguese primary health care: An implementation research," *Int J Environ Res Public Health*, vol. 17, no. 3, pp. 1–11, 2020, doi: 10.3390/ijerph17030815.

[11] World Health Organization, "Ottawa Charter for Health Promotion," vol. 290, no. 6, p. 48, 1986, doi: 10.1038/scientificamerican0604-48.

[12] Ottawa, "Carta de Ottawa, Promoção da saúde nos países industrializados," *Conferência Internacional Sobre Promoção da Saúde*, vol. 1, no. 1, pp. 1–9, 1986.

[13] D. Nutbeam and I. Kickbusch, "Health promotion glossary," *Health Promot Int*, vol. 13, no. 4, pp. 349–364, 1998, doi: 10.1093/heapro/13.4.349.

[14] J. Fries, L. Sandvik, J. Erikssen, E. Thaulow, and G. Erikssen, "Reducing Health Care Costs by Reducing the Need and Demand for Medical Services," *N Engl J Med*, vol. 328(8), pp. 2010–2013, 1993.

[15] J. Fries, H. Harrington, R. Edwarsd, L. Kent, and N. Richardson, "Randomized Controlled Trial of Cost Reductions from a Health Education Program: The California Public Employees' Retirement System (PERS) Study," *Nancy Richardson is Nationa.l*, pp. 216–223, 1994.

[16] M. Martins, "A Promoção da saúde: percursos e paradigma," 2005.

[17] P. Buss, "Uma introdução ao conceito de promoção de saúde.," in *Promoção da saúde: Conceitos, reflexões, tendências*, Fiocruz., D. Czeresnia and C. Freitas, Eds. Rio de Janeiro , 2012.

[18] I. T. S. B. Heidmann, M. C. P. de Almeida, A. E. Boehs, A. de M. Wosny, and M. Monticelli, "Promoção à saúde: trajetória histórica de suas concepções," *Texto & Contexto - Enfermagem*, vol. 15, no. 2, pp. 352–358, 2006, doi: 10.1590/s0104-07072006000200021.

[19] M. S. V. Lopes, K. R. O. Saraiva, and R. B. Ximenes, "Análise Do Conceito De Promoção Da Saúde," *Análise do conceito de promoção da saúde*, vol. 19, no. 3, pp. 461–8, 2010.

[20] A. B. Xavier, "As Cartas das Conferências Internacionais sobre Promoção da Saúde: uma análise das tendências ideo-políticas," *7º Seminário frente nacional contra a privatização da saúde: Saúde em Tempos de Retrocessos e Retirada de Direitos*, 2017.

[21] M. C. Faria, "As conferências internacionais sobre promoção da saúde – a passagem à ação," 2020, pp. 135–144.

[22] L. Graça, *Promoção da saúde: Uma abordagem positiva da saúde*, vol. I. 2015.

[23] World Health Organization, "Health Promotion," *World Health Organization*, 2020.

[24] L. Hersh, B. Salzam, and D. Snyderman, "Health literacy in primary care practice," *Am Fam Physician*, vol. 92, no. 2, pp. 118–124, 2015, [Online]. Available: http://www.embase.com/search/results?subaction=viewrecord&from=export&id=L605246200

[25] I. Gatulytė, V. Verdiņa, Z. Vārpiņa, and Á. Lublóy, "Level of health literacy in Latvia and Lithuania: a population-based study," *Archives of Public Health*, vol. 80, no. 1, Dec. 2022, doi: 10.1186/s13690-022-00886-3.

[26] A. Barańska and A. Kłak, "Recent Trends in Health Literacy Research, Health Status of the Population and Disease Prevention: An Editorial," *International journal of environmental research and public health*, vol. 19, no. 14. NLM (Medline), Jul. 01, 2022. doi: 10.3390/ijerph19148436.

[27] C. I. Fertman and D. D. Allensworth, *Health promotion programs - From Theory to Practice*, vol. 75, no. 9. 2010.

[28] N. Halfon, K. Larson, M. Lu, E. Tullis, and S. Russ, "Lifecourse health development: Past, present and future," *Matern Child Health J*, vol. 18, no. 2, pp. 344–365, 2014, doi: 10.1007/s10995-013-1346-2.

[29] H. I. Sarsak, "Telerehabilitation services : A successful paradigm for occupational therapy clinical services ?," *International Physical Medicine & Rehabilitation Journal*, vol. 5, no. Figure 3, pp. 93–98, 2020, doi: 10.15406/ipmrj.2020.05.00237.

[30] I. B. Wilson and D. Paul, "Health-Related Quality of Life," *JAMA*, vol. 273, 1995.

[31] Agência Nacional de Saúde Suplementar, *Cartilha para a Modelagem de Programas para a Promnoção da Saúde e Prevenção de Riscos e Doenças*. Rio de Janeiro, 2011.

[32] D. D. Inman, K. M. van Bakergem, A. C. Larosa, and D. R. Garr, "Evidence-based health promotion programs for schools and communities," *Am J Prev Med*, vol. 40, no. 2, pp. 207–219, 2011, doi: 10.1016/j.amepre.2010.10.031.

[33] L. S. Chapman, "Meta-Evaluation of Worksite Health Promotion Economic Return Studies: 2012 Update," *American Journal of Health Promotion*, vol. 26, no. 4, pp. 1–12, 2012, doi: 10.4278/ajhp.26.4.tahp.

[34] L. Povlsen and I. Borup, "Health Promotion: A developing focus area over the years," *Scand J Public Health*, vol. 43, no. December 2014, pp. 46–50, 2015, doi: 10.1177/1403494814568595.

[35] D. Stokols, "Translating Social Ecological Theory Into," *American Journal of Health Promotion*, vol. 10, no. 4, pp. 282–298, 1996.

[36] Agência Nacional de Saúde Suplementar, "Manual técnico de promoção da saúde e prevenção de riscos e doenças na saúde suplementar," *American Heart Association*, p. 36, 2015.

[37] I. da S. Brito, "Intervenção de Conscientização para Prevenção da Brucelose em Área Endémica," Instituto de Ciências Biomédicas Abel Salazar da Universidade do Porto, 2008.

[38] G. Müller, M. Pfinder, C. Schmahl, M. Bohus, and L. Lyssenko, "Cost-effectiveness of a mindfulness-based mental health promotion program: Economic evaluation of a nonrandomized controlled trial with propensity score matching," *BMC Public Health*, vol. 19, no. 1, pp. 1–12, 2019, doi: 10.1186/s12889-019-7585-4.

[39] D. C. Alves, M. A. D. Ugá, and M. C. Portela, "Promoção da saúde, prevenção de doenças e utilização de serviços: avaliação das ações de uma operadora de plano de saúde brasileira," *Cad Saude Colet*, vol. 24, no. 2, pp. 153–161, 2016, doi: 10.1590/1414-462x201600020199.

[40] M. da L. Antunes, "A literacia em saúde: investimento na promoção da saúde e na racionalização de custos," *As Bibliotecas da Saúde: Que Futuro? Actas das XI Jornadas APDIS*. pp. 123–33, 2014.

[41] E. I. Hatziandreu, J. P. Koplan, M. C. Weinstein, C. J. Caspersen, and K. E. Warner, "A cost-effectiveness analysis of exercise as a health promotion activity," *Am J Public Health*, vol. 78, no. 11, pp. 1417–1421, 1988, doi: 10.2105/AJPH.78.11.1417.

[42] F. B. Onofrio and P. Alegre, "Ações de Promoção de Saúde e Prevenção de Doenças adotadas por operadoras com maior Índice de Desempenho na Saúde Suplementar (IDSS)," 2007.