EMBJ.ORG FOR YOUNG DOCTORS

EUROMEDITERRANEAN BIOMEDICAL JOURNAL
2017,12 (36) 166–169
(*FORMERLY: CAPSULA EBURNEA*)

Commentary

VALUE-BASED EVIDENCES TO FACE THE NEW CHALLENGES OF HEALTH PROMOTION IN A SUSTAINABLE HEALTHCARE SYSTEM.

Claudia Marotta [1], *Walter Mazzucco* [2]

[1]*Scuola di Specializzazione in Igiene e Medicina Preventiva, University of Palermo.*

[2]*Dipartimento Scienze per la Promozione della Salute e Materno Infantile (PROSAMI), University of Palermo.*

ARTICLE INFO

Article history:
Received 30September 2017
Revised 13 October 2017
Accepted 22 October 2017

Keywords:
health promotion, prevention, health education, Ottawa Charter, Sustainable Development Goals, public health; Public Health Genomics.

ABSTRACT

Thirty years ago, starting from a new awareness of the limits of biomedical power and healthcare services to solve all population' health problems, the Ottawa Conference coined a New Public Health by defining Health Promotion (HP) as "the process of enabling people to increase control over and to improve their health and well-being". Since then and over the next 30 years, several programs have been developed all over the world to translate HP concepts into practical actions and many health successes have been achieved as well. Nowadays, even if the global health context has strongly changed, the original principles of HP still provide a solid ground for action, being the community engagement and empowerment of women and men still at the heart of any health strategy, in a shared responsibility of all society's sectors approach. However, since now HP promotion efforts have been directed toward priority health problems in a issue- settings-based approach, but in a sustainable and ethical prospective this will be not enough now: a deeper attention on effectiveness is request and an evidence- and value-based HP approach is needed to support the Public Health community and the policy-making, including the new challenges related to Public Health Genomics..

1. Commentary

According to Tannahill's model, Health Promotion (HP) comprises the efforts to enhance positive health and prevent illness through the overlapping spheres of health education, prevention and health protection[1,2,3], where health education includes consciously constructed opportunities of learning and knowledge improving, involving also health literacy, and of developing life skills in support of individual and community health, while disease prevention covers measures not only to prevent the occurrence of diseases and related risk factors, but also to arrest their progress and reduce their consequences once established[4]. Thirty years ago, starting from a new awareness of the limited ability of biomedical power and healthcare services to solve all the health problems faced by the population[5], the Ottawa Conference coined a New Public Health by defining HP as "the process of enabling people to increase control over and to improve their health and well-being"[4,6]. A revolutionary vision of health, going beyond of prevention and correct lifestyles, was stated by clarifying the prerequisites for health and recognizing at the same time the priority actionareas with the aim to build healthy public policy, create supportive environments, strengthen community action, develop personal skills, and 'reorient' health services[6]. In the same way, some years before, the Declaration of Alma Ata led the first real change in thinking health, stating Primary Health Care as the principle mechanism for health-care delivery[7]: health improvements would not occur just by implementing health services or by imposing public health solutions with a top-down approach, but a shift in power from the providers of health services to the consumers of those health services and the whole community was needed.

Thus, the role of organizations, systems and communities, as well as individual behaviours and capacities in creating choices and opportunities for better health was emphasized, introducing the concept of

* *Corresponding author*: Claudia Marotta, claudia.marotta@unipa.it
DOI: 10.3269/1970-5492.2017.12.36
 ISSN: 2279-7165 - Available on-line at www.embj.org

empowerment in the health sector[8,9].

Since the presentation of the Ottawa Charter and over the next 30 years, several programs and projects (e.g. tobacco or alcohol use reduction, improving of physical activity and nutrition, etc.) have been developed and implemented all over the world to translate health promotion concepts and strategies into practical actions and many health successes have been achieved as well[10,11]. In fact, demographic and social transformations were globally experienced as result of population growth, urbanization and environmental changes, and the burden of chronic non- communicable diseases (epidemiological transition[12]) have become a predominant public health challenge, even in lower income countries[13,14], leading to huge implication for HP and not only[15]. Meanwhile, also the idealistic "absolute definition" of health adopted by World Health Organization (WHO) in 1946, considering health as a "*state of complete physical, mental and social well-being and not merely the absence of disease or infirmity*"[16,5], became outdated in favour of new "relative definitions" based on the life context. In particular, thanking to the rediscovery of Canguilhem's definition, health was re-considered as "*the individual's ability to adapt to one's environment*", depending on available resources and spatial and temporal framework[17,18]. By replacing perfection with adaptation, a more comforting and creative paradigm for health was defined, in which everybody can actively contribute and participate[17].

Also the concept of Public Health (PH) has been evolving along time, since advances in genomics promised new ways of differentiating individuals and groups within populations according to their susceptibility to disease or ability to benefit from targeted treatment or changing lifestyles and diet[19,20]. As personalised prevention is expected to become a complementary approach to existing paradigms of classical public health practice[21], the multidisciplinary approach of "Public Health Genomics" (PHG) was developed to provide the *"responsible and effective translation of genome-based knowledge and technologies into public policy and health services for the benefit of population health*[22].

In the same perspective of facing the new challenges for health systems, the concept of prevention was re-adapted as well and further stages have been added to the three classical ones (primary, secondary and tertiary) within the HP framework. Primordial or pre-primary prevention consists of all actions taken to minimize future hazards to health and hence inhibit the establishment factors (environmental, economic, social, behavioural, cultural) known to increase the risk of disease. It addresses broad health determinants rather than preventing personal exposure to risk factors, which is the goal of primary prevention[23-25]. Furthermore, quaternary prevention was coined to identify every healthy individual or patient at risk of over medicalization to mitigate or avoid the consequences of unnecessary or excessive intervention and unjustified health expenditure as well as to suggest interventions which are ethically acceptable[26-28]. In this field both health literacy and education play a role in preventing the *chain of events initiated by an unnecessary test, an unexpected result, or patient or physician anxiety, which results in ill-advised tests or treatments that may cause avoidable adverse effects and/or morbidity* (namely, *cascade effect*[29]) and the advent of *unpatients*, defined as subjects sharing a genetic predispositions and waiting for the appearance of any symptoms of illness, while organizing their lives in function of periodic medical examinations and analysis or even feeling sick without any diseases or just developing psychosomatic symptoms[30].

In this new theoretical framework, the original principles of HP still provide a solid ground for action even today that the global context has strongly changed[31]. Equity, social justice, community engagement and empowerment of women and men are being challenged, but still are at the heart of any HP strategy[15], in a shared responsibility of all society's sectors approach[10]. The revisited Tannahill's model of HP also referred to sustainability to reflect the need for HP to give priority to global environmental concerns and to focus on preserving and protecting environmental resources for of long-term survival and health[32]. Targets of HP interventions should continuous to be all determinants of health within cities and communities[33], viewed as dynamic systems with strengths and capabilities that can be influenced and supported in ways that will improve health[34].

More recently, the 9th WHO Global Conference on HP[35] has defined the 2030 Agenda for Sustainable Development (SD) and the goals to achieve[33], providing the platform for a whole-of-society approach through a multi-sectorial collaboration: a new global context for HP was outlined, in order to change the environment in which people make their lifestyle choices[10] and to ensure them the complete fulfilment of their potential, to live in health and with dignity and equality[33]. In the same direction, the Euro Health Net has developed the "rejuvenate" framework for HP, explaining ten essential actions for the coming decade to improve health and help implementing the 2030 agenda for SD[15]. Also the European Public Health Association (EUPHA) has reiterated its commitment to the principles of the Ottawa Charter calling on the whole public health community to work in recognising and fighting multi-tiered determinants of health, and stressing the use of data to give voice to the good governance forHP[36]. In fact, since now HP promotion efforts have been directed toward priority health problems in a issue- settings-based approach [14,37], but in a sustainable prospective this will be not enough: a deeper attention on effectiveness is request[37-39] and an evidence- and value-based approach is needed to support the PH community and the policy-making.

The example of PHG in satisfying the needs related to the diffusion of genetic and genomic tests promising screening values is paradigmatic: the coordinated effort to foster the development of dedicated policies and actions across European Countries [40-44] represented one of the main drivers needed to face the challenge of managing a future personalized healthcare and to shift from the treatment of established disease to early diagnosis and disease prevention – particularly for complex diseases - through an appropriate use of genomic technology in PH in the view of a sustainable healthcare and of a better value for healthcare [45-46].

In conclusion, in line with the renewed commitments of the PH communities, it can be stated that evidence- and value-based HP is probably the most ethical, effective, efficient and sustainable approach to support healthy communities [5].

References

1) Tannahill A. What is health promotion? Health Educ J 1985; 44:167e8.
2) Downie RS, Fyfe C, Tannahill A. Health promotion: models and values. Oxford: Oxford University Press.1990.
3) Downie RS, Tannahill C, Tannahill A. Health promotion: models and values. 2nd ed. Oxford University Press. 1996.

4) Nutbeam D. Health promotion glossary. Health Promot Int. 1998.
5) Lincoln P, Nutbeam D. What is health promotion? Health Promotion Theory. Open University Press. 2006.
6) WHO. Ottawa charter for health promotion. Ottawa: WHO, 1986.
7) WHO. International Conference on Primary Health Care (WHO). Declaration of Alma-Ata. Alma-Ata, USSR, 6-12 September 1978.
8) Catford J. Ottawa 1986: back to the future. Health Promot Int. 2011 Dec;26 Suppl 2:ii163-7.
9) WHO. Health Promotion Glossary. Geneva, 1998.
10) Chan M. The relevance and importance of promoting health in national SDG responses, Keynote address at the 9th Global conference on health promotion, Shanghai, 2016.
11) Tramuto F, Mazzucco W, Maida CM, Affronti A, Affronti M, Montalto G, Vitale F. Serological pattern of Hepatitis B, C, and HIV infections among immigrants in Sicily: epidemiological aspects and implication on public health. J Community Health. 2012 Jun;37(3):547-53.
12) De Flora S, Quaglia A, Bennicelli C, Vercelli M. The epidemiological revolution of the 20th century. FASEB J. 2005 Jun;19(8):892-7.
13) WHO. Global Status Report on Noncommunicable Diseases. WHO, 171 pp. 2010.
14) Kumar S, Preetha G. Health Promotion: An Effective Tool for Global Health. Indian J Community Med. 2012;37(1):5-12.
15) Health Promotion Statement "Promoting Health and Wellbeing towards 2030: taking the Ottawa Charter Forward in the context of the UN Sustainable Development Agenda 2030". EuroHealthNet, 2016.
16) Constitution of the World Health Organization. World Health Organization International Health Conference. New York, 1946.
17) No authors declared. What is health? The ability to adapt. The Lancet. Volume 373 , Issue 9666 , 781. 2009.
18) Mazzucco W. Evoluzione del concetto di salute e revisione degli indicatori tradizionali: l'esempio del tasso di mortalità infantile. Capsula Eburnea 4(5) 2009.
19) Boccia S. Why is personalized medicine relevant to public health? Eur J Public Health. 2014;24.3: 349-350.
20) Cerame G, Meli V, Vitale F, Firenze A, Viviano E, Mazzucco W, Romano N.A study to evaluate the lifestyle of medical students in Palermo (Italy). Ig Sanita Pubbl. 2008 Jul-Aug;64(4):473-88.
21) Mazzucco W, Pastorino R, Lagerberg T, Colotto M, d'Andrea E, Marotta C, Marzuillo C, Villari P, Federici A, Ricciardi W, Boccia S. Current state of genomic policies in healthcare among European Union member states: results of a survey of chief medical officers. Eur J Public Health. 2016 Sep 29.
22) Burke W, Khoury MJ, Stewart A, Zimmern RL and the Bellagio Group. The path from genome-based research to population health: development of an international public health genomics network. Genet Med. 2006;8:451-458.
23) Primer on Population Health. A virtual textbook on Public Health concepts for clinicians. Chapter 4: Basic Concepts in Prevention, Surveillance, and Health Promotion. The Association of Faculties of Medicine of Canada (AFMC), 2007. Available from: http://phprimer.afmc.ca/part1-theorythinkingabouthealth/chapter4basicconceptsinpreventionsurveillanceandhealthpromotion/thestagesofprevention. (Last accessed: 10/10/17).
24) Epidemiological basis for preventive strategies. HealthKnowledge 2011. Available from: http://www.healthknowledge.org.uk/public-health-textbook/research-methods/1c-health-care-evaluation-health-care-assessment/epidemiological-basis-pstrategies. (Last accessed: 10/10/17).
25) Pellanda EC, Pellanda LC.Primordial Prevention and Wearable Health Devices: The Wearables in Cardiology. Arq Bras Cardiol. 2016 Jun;106(6):455-6.
26) Jamoulle M. About prevention; the Quaternary prevention. UCL. 2008.
27) Jamoulle M. Quaternary prevention, an answer of family doctors to overmedicalization.Int J Health Policy Manag. 4-Feb-2015; 4:1–4.
28) Noble M. Quaternary prevention: An attempt to avoid the excesses of Medicine. Vertex. 2015 Sep;XXVI(123):343-349.
29) Deyo RA. Cascade effects of medical technology. Annu Rev Public Health 2002;23:23-44.
30) Jonsen AR, Durfy SJ, Burke W, Motulsky AG. The advent of the "unpatients". Nat Med 1996;2(6):622-4.
31) Jakab Z, Galea G. Enduring principles in a fast-changing world.Health Promot Int. 2011.
32) Tannahill A. Health promotion: The Tannahill model revisited. Public Health. 2008.
33) Shanghai Declaration on promoting health in the 2030 Agenda for Sustainable Development, 2016. Available from: http://www.who.int/healthpromotion/conferences/9gchp/shanghai-declaration.pdf?ua=1. (Last accessed: 10/10/17).
34) Nutbeam D, Harris E. Theory in a Nutshell. A Practical Guide to Health Promotion Theories. McGraw-Hill Australia Pty Ltd, Sydney, Australia, 2004.
35) 9th Global Conference on Health Promotion: "Promoting Health in the Sustainable Development Goals (SDGs): Health for all and all for health" Shanghai 2016. Available from: http://www.who.int/healthpromotion/conferences/9gchp/en/. (Last accessed: 10/10/17).
36) European Public Health Association and Austrian Public Health Association. The Vienna Declaration. Vienna, 2016.
37) Wong ML. Evidence-based health promotion: applying it in practice. Ann. Acad Med Singapore. 2002 Sep; 31(5):656-62.
38) Allison KR, Rootman I. Scientific rigor and community participation in health promotion research: are they compatible. Health Promot Int. 1996:(4), 333-340.
39) Glasgow RE, Vogt TM, Boles SM. Evaluating the public health impact of health promotion interventions: The RE-AIM framework. Am J Public Health. 1999, 89, 1322-1327.
40) Dooris, M. Healthy settings: Challenges to generating evidence of effectiveness. Health Promot Int. 2006.
41) Simone B, Mazzucco W, Gualano MR, Agodi A, Coviello D, DagnaBricarelli F, Dallapiccola B, Di Maria E, Federici A, Genuardi M, Varesco L, Ricciardi W, Boccia S. The policy of public health genomics in Italy. Health Policy. 2013 May;110(2-3):214-9.
42) Mazzucco W, Ricciardi W, Boccia S. Addressing the gap between genetics knowledge and clinical practice: a pilot study to implement genetics education among physicians in Italy. Ital J Public Health. 2012;9(4):9–11.

43) Michelazzo MB, Pastorino R, Mazzucco W, Boccia S. Distance learning training in genetics and genomics testing for Italian health professionals: results of a pre and post-test evaluation. Epidemiology, Biostatistics and Public Health. 2015 Vol 12, No 12.
44) Ianuale C, Leoncini E, Mazzucco W, Marzuillo C, Villari P, Ricciardi W, Boccia S.Public Health Genomics education in post-graduate schools of hygiene and preventive medicine: a cross-sectional survey.BMC Med Educ 2014 Oct 10;14:213.
45) Boccia S, Adany R, Boffetta P, Burton H, Cambon-Thomsen A, Cornel MC, Gray M, Jani A, Maria Knoppers B, Khoury MJ, Meslin EM.Beyond public health genomics: proposals from an international working group. Eur J Public Health, 2014. 24(6): p. 877-9.
46) Gray M. Better value healthcare, 2016. Available from: http://www.bettervaluehealthcare.net/value-based-healthcare/. (Last accessed: 10/10/17).