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Health in all Policies? Rethinking Prevention

Gesundheit in allen Politikbereichen? Prävention neu denken

EDITORIAL

ACCEPTED: January 2022

PUBLISHED ONLINE: February 2022

Steinacker JM, Matits L, Wendt J, Fischer JE, Sniehotta F. Health in all policies? rethinking prevention. Dtsch Z Sportmed. 2022; 73: 3-6. doi:10.5960/dzsm.2021.520

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Three years ago, no-one would have imagined that a simple RNA-strand packed into a smart bioactive envelope would disrupt our public and private lives. The virus taught us that neither high-tech innovations nor high-end medicine alone suffice to ascertain well-being for all. Instead, almost all policies from economics to education were affected.

What started as a term coined by the Finnish presidency of the EU in 2006 "Health in all policies" finally became a mandate. The Covid-19 prevention challenge showed us that successful prevention requires action at the individual level, the immediate or meso-context of local communities and the higher level of states or even large regions. The pandemic also revealed how individual decision making, communication, marketing, beliefs, behaviour of role models, dynamics of social media, dynamics of virus mutation, simple measures such as wearing FFP2 masks, social distancing, testing strategies and vaccination were all intertwined. Yet, each country and/or within-country subgroups of populations followed differing individual and collective policies. The pandemic evolved as a life laboratory about prevention failures and successes involving the entire planet.

Now one being recently sick from Covid-19 or having prematurely lost loved ones would not subscribe to the saying „health is the highest asset". Consequently, the term "prevention" sounds logical, maintaining a positive connotation. But the road to successful "prevention" remains as elusive as a simple solution to treatment of Covid-19. Scientists initially believed, once the vaccines became available in record-setting short development time, people would embrace the opportunity. Instead we observe dissent never imagined throughout our communities. The first lesson learned: if there is no universally agreed belief about the most appropriate individual decision regarding vaccination or even simply wearing FFP2 masks, how much more complicated does it become when talking about long-term lifestyle changes? Societies have to deal with an increasing number of agitated people who don't understand all the preventive measures against the transmission of the virus. Humans have been fighting endless wars about the right religious beliefs – including within Christianity. We thought that, at least in Europe, we would be more enlightened by now and make our decisions based on reasoning. What we need to learn is that our brains are wired differently: we weigh information according to beliefs, sympathy, peers, role-models and other non-rational factors. No surprise that some arrive at such distrust towards science, medicine and government that they prefer to be better off not getting vaccinated being the best individual path towards long-term health.

Finally, the Covid-19-pandemia teaches us a further lesson: public infectious diseases and non-communicable lifestyle diseases are closely linked. Public, pandemic-related restrictions led to large scale changes in behaviour: on average physical activity decreased, well-being decreased, while psychosocial stress and body weight went up. But not in the entire population. Rather, again social determinants of health came into effect: those living with ample resources were less likely to be adversely affected than those living in cramped social housing. The Covid-19 pandemic highlighted the relevance of social and contextual determinants of health for prevention (11). Like a laser-beam spotlight the pandemic showed that we have not yet understood the process of effective health communication in our society. Health and healthy lifestyle are private and emotionally charged matters. Scientific arguments and facts carry different weight depending on one's point of view.

Decisions on Lifestyle are made by People themselves

The simple fact is that any behavioural changes or altered lifestyles occur at the individual level (13). No one can stop smoking for another person. The decision-making process to change behaviour or to alter one's lifestyle is also not purely knowledge-based, but emotional and goal-oriented (19, 24). This is well understood by those who apply individually targeted advertising and content placement from online-searches to social media algorithms. What we believe to be "free will" is more often subtly influenced by tailored algorithms and targeted advertising, making us longing for products or services that often adversely affecting our health in the long-term.

In this context, the environment and the people to whom people relate, in the family, at school, at work, as well as role models in public life, play an extremely important role (5, 14, 9). Therefore, when looking at human beings in a more realistic way, they will not always make the optimal decision for a healthy lifestyle. Behaviour change research has shown that most everyday decisions are made by an habitual autopilot, not requiring the scarce resource of thoughtful evaluation ›

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(19). Experimental economic research further shows that in many situations people behave differently than the theory of rational utility maximisation (23). Several theories acknowledge this myriad of non-rational influencers on habits. One of these favours „nudging". For example, in a cafeteria, fruit and vegetables are placed at eye level to increase their consumption. And nudges as well as structuring the environment indeed show small effect sizes that may translate to relevant change at the population level (17, 22, 23).

A subclass of "nudging" are information nudges. The theory here is to offer more and tailored information to the target group so that the desired choice can be made. The pandemic teaches us that views may hugely differ across peer groups and individuals about what constitutes an "optimal" decision. When such nudging is used by the state, it is labelled „libertarian paternalism" as the state is supporting "better" choices by many intervention options: default rules, use of social norms, disclosure of information, increase in ease and convenience, warnings and labelling, precommitment strategies (23). Change in lifestyle is unthinkable on a population level without an array of such nudges effectuated in "all policies". For example, in urban mobility, active transport by cycling can be promoted positively by bike paths, secure bike parking, changing rooms for employees, offering of rentals, subsidies for purchases (18). While commercial advertising discloses their nudges, health promotion or prevention nudges by the state must be scientifically and rationally justified. They need to retain real free choices and "hidden agenda" or interests must be disclosed.

People are Stakeholders in Prevention

If needs, preference and situation of the targeted people are not considered, then the entire preventive process may derail, resulting in people refusing rationally based and justified measures. Instead they may resort to their own "decisions", whether overtly or covertly; in any case behaviour is not changed (7, 13). An often-cited example is the top-down introduction of "healthy school meals" in the UK, where upset parents resorted to handing over what they felt was the „rightful" food for their children at the school fence. Interestingly, the nutrition intervention had significant effects on scholarly outcomes (4). When appreciating the importance of accessible, attractive and understandable information, the scarcity of formulated guidelines or health policies exist in most European public administrations that are accessible to the normal citizen is simply astonishing (18). Thus, if people do not adopt to what is scientifically deemed to be rationally justified as „proper" behaviour, we should ask whether society has failed to appropriately convince these individuals rather than finger pointing on individual irrationality (4). We have learned from school-programs, that bottom-up-approaches which respect the targeted individuals are very successful and have health and economical outcomes (12, 13, 14, 15).

Therefore, people should not only be considered as targets of (preventive) measures. They must be involved as active participants in an interactive process in which their voice, their concerns and their ambitions are valued. In this way, measures can be co-developed in a way in which they can contribute their legitimate interests (1, 4, 14). This concept of stakeholder involvement – as unfamiliar for a more paternalistically oriented specialty such as medicine – does not only address the target group of measures. It rather describes an interactive process of all stakeholders involved from the private, public, social and political environment. In an ideal decision-making process, all stakeholders communicate with each other, negotiate on measures, make joint decisions, accept and adopt them (7). Here, medicine can learn from other sectors of the economy, where customer orientation and understanding customer reality have long been key components of success. The difference compared to prevention is that success in business translates to increased profit, while the revenue from prevention is an increased number of life years spent in good health (9).

As communication is important, modern social media should facilitate information exchange. In reality, however, we find great imbalances and even a simple lack of facts, if not lies. This situation may be created by private or sociopolitical interest groups, but also by cultural and language differences. Such biased „information bubbles" are problematic as they support the self-exclusion of certain groups from real social communication and facilitate adoption of non-evidence-based "alternative" facts – whether intentionally or unintentionally. Private or public interest groups nowadays exploit such mechanisms to influence public processes, further complicating the preventive efforts. This leads to a climate of persistent mistrust in which people perceive decision-making processes as non-transparent. Thus, they come to believe that groups with financial and intellectual resources are better able to influence decisions, while others try to prevent action through legal action. Covid-19 illustrates in fast-motion, how this rapidly may lead to the perception of being excluded or not being considered in decision-making, which in turn emotionally „justifies" refusing advice (11). Therefore, in modern democratic societies, new models of citizen participation must be explored, for example citizens' forums and advisory councils. So far, however, not all groups are represented in these processes, which is why such a co-creation process needs to be continuously explored and improved.

Health Policies must be Publicly Negotiated

Given the importance of accessible, attractive and understandable information, it is astonishing how few formulated guidelines or health policies exist in most European public administrations that are accessible to the normal citizen (18). Policies can be defined as „decisions, plans and actions that are enforced by national or regional governments which may directly or indirectly achieve specific health goals within a society" (4, 18). Policies should create supportive environments to stimulate a healthy lifestyle such as healthy diet and physical activity (and/or discourage sedentary behaviour) (3, 18) – but for the most, official publications lack the sharpness by individual contributors that can already be found on social media such as Instagram©.

Many public decision-makers try to make the best possible use of public resources, to invest and spend money carefully. Nevertheless, there are considerable differences when it comes to formulated policies. Some countries like the US, Canada, Australia, Great Britain or the Netherlands are much more advanced, Germany is more on the libertarian level (18). Perhaps this was often considered unnecessary or too complicated (if one does good, one does not need to talk much about it) and the potential of stakeholder dialogue for the development of health policies was underestimated (1).

The Role of Medicine is Changing

There is no single doubt that scientific medicine is crucial for understanding diseases, their development and the immediate treatment. A differentiated health care system is part of the basic structures of modern societies (7). Enormous progress has been made by analysing diseases to uncover the pathophysiological, biochemical and molecular basis in order to develop therapies, technologies and drugs. Thus, most treatments in hospitals and medical practices are also primarily oriented on processes of immediate illness amelioration and efficiency. When treating an acute heart attack or operating on a fractured neck of femur, medicine is champion and prevention and lifestyle naturally momentarily fade into the background. However, although more sophisticated therapies and technologies become available, due to the magnitude of related costs, the budgetary resources available for the health system are becoming increasingly scarce.

Health economics shows that in modern developed societies like Germany or the US, health care services costs and outcomes are not closely related (7, 8). For example, the USA is spending 50% more of the GDP (total market value of all final goods and services produced in an economy for a given year) on health care services than any other industrialised country, yet the outcomes of this costly healthcare system are at best mid-table (20). The focus of the USA healthcare system is mainly on high-level procedures and technologies as well as on controlling internal costs and creating revenue. These systems create meaningful outcomes of survival and lower rates of impairment for few affluent patients, while at the same time large inequalities in access to health care and public health continue to further increase (20).

Thus, in order to be involved in the long-term health development of humanity, medicine must start focusing more on the well-being of individuals outside of hospitals (7, 8). Long-term changes in life-style can only take place where people live, meet and move.

This should also be considered against the background of the growing importance of the environment and lifestyle in the development of diseases such as depression, type II diabetes, etc. as opposed to a genetic predisposition (7, 21).

Medicine has to become Sustainable

Technology-based modern medicine is reaching its limits in the treatment of common and chronic diseases; interventions and surgeries cannot be repeated indefinitely and often do not lead to a change in pathophysiology. Hence, medicines become costly due to their long-term use. In contrast, lifestyle plays an important role in the development and maintenance of chronic diseases and must be considered in their treatment. For example, a behavioral, very brief, physician-delivered opportunistic intervention is acceptable to patients and is already an effective means of reducing the average weight of the population (3).

Yet, it is extremely difficult to implement lifestyle modification in the case of an existing disease. It would be much more in everyone‘s interest to prevent diseases before they even develop (21). Preventive measures can not only improve the individual well-being and quality of life of individuals, but also reduce the burden of disease on the societies (4, 9, 24). Investing in prevention pays off not only through a reduction in the costs of illness, but also through an increased level of benefits for those affected. A well-intended but serious misunderstanding of people‘s preferences is the belief held by clinical preventionists that individuals will embrace more sophisticated measures of early detection of possible risk. People want to live happy and healthy lives and they rather refrain from being an accumulated assembly of several risks that potentially manifest decades later (7, 13).

While early risk detection has its place, for example in prevention of the consequences of undetected hypertension, the focus needs to be shifted on strengthening the well-being resources of people and piggy-backing risk reduction (20). Fear has not been a good seller, as seen in tobacco warnings on cigarette packages or in HIV-prevention but was more effective when combined with psychological advises (16, 17, 22, 23). Maltreatment and distress and the protective role of social support should be considered (12, 16). Currently there is an emerging mainstream desiring “healthy and purposeful” lifestyle. Medicine might be well advised to align with these motives (13).

Prevention and health promotion are needed as a further – if not essential – pillar in order to bring medical competence to the general public (6, 8). Furthermore, prevention should and must be included and shaped in the programme of medical faculties (8). In order to meet these challenges, preventive measures must also be promoted by university teaching hospitals but must be incorporated long-term by all healthcare providers. This means, the hospital of the future will have to care about sustainability which means their effect for the related population and communities.

Doctors have to Learn to Think and Talk differently

Naturally, when clinicians consider prevention, they focus on the individual, how to prevent or moderate progression in this particular individual patient. The concept of risk factors is particularly important for doctors to categorise the patient‘s health problems and to design therapies. However, several of them such as age and sex are not even modifiable by the individuum. Thus, our risk communication with the patient needs to be revisited (22, 23). The patient is the centre of the preventive action, the patient takes decisions and responsibility, doctors in turn should consider themselves as the expert adviser (19). This requires other communication skills like motivational interviewing a behaviourally-informed, very brief, physician-delivered opportunistic intervention is acceptable to patients and an effective way to reduce population mean weight (1).

Until now, most doctors do not regularly counsel patients on lifestyle (10, 14). They regard this as too complicated, too time-consuming, and not being financially rewarding. However, such interaction might be feasible, as no one expects doctors to coach exercise therapy nor to design training programs. Doctors can motivate patients and refer to physical activity, nutrition and stress reduction specialists or to community-based programs (3, 6, 21). The Exercise-is-Medicine Initiative or the FYSS book in Sweden are good examples of such network initiatives (3, 6, 14).

Theses

1. Prevention is the sustainability concept of health development. In highly developed health care systems, prevention, has a cross-disease effect and thus clearly saves resources. Thus, life-style changes, such as appropriate physical activity, nutrition and stress reduction measures, lead to a reduction in the risk of contracting a large number of diseases.

2. In order to achieve health goals, they should be set in writing, appropriate policies should be designed and their implementation monitored. Inequalities in access to health resources need to be carefully monitored.
3. To achieve long-term positive effects of prevention and to develop appropriate measures, participatory processes as a bottom-up approach are useful.
4. Policies should facilitate interaction and communication of different stakeholders. This should lead to an improved implementation of prevention and health promotion through accumulated competence.
5. Medical faculties have to adjust their teachings for medical students to focus not only on diseases but on prevention and public health. Hospitals should adopt sustainability goals of health interventions for their policies.
6. An interdisciplinary approach enables optimal delivery. Interdisciplinary cooperation of medical doctors with many health care professions as nurses, physiotherapists and sport therapists as well as community resources, fitness centres and sports clubs is necessary.
7. Impact on the environment: Moving around by bicycle or changing one's diet could contribute significantly to reducing CO_2 emissions. So, what is good for human health is also good for the planet.

Health is present in all policy areas. It is desirable that governments and executive agencies have access to high-quality evidence to guide their policies toward prevention.

As far as research and also the evaluation of prevention in all policy areas are concerned, we are dependent on findings from other countries around the world. To meet this demand, the overall volume of targeted research funding must be geared to the requirements of the prevention agenda.

In summary, prevention and health policies are necessary within medicine, science, politics and society in order to advance health promotion, to improve the well-being of individuals and to maintain and promote functionality in the long term. For all those involved, prevention represents the fundamentally right as well as the strategically smart thing to do. ■

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