

ORIGINAL ARTICLES

Education for future health care: A radical shift in perception, learning and action

Katja van Vliet¹, Petrie F. Roodbol², Astrid M.J. Chorus¹, Hans C. Ossebaard*^{1,3}

¹National Health Care Institute, Diemen, The Netherlands

²Department of Nursing Sciences, Faculty of Medical Sciences, University of Groningen, Groningen, The Netherlands

³Department of Psychology, Health and Technology, University of Twente, Enschede, The Netherlands

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ABSTRACT

What should we do now to prepare health professionals for future health care demand challenges in order to ensure accessible, affordable, high-quality health care and social support? This question of worldwide interest is thoroughly addressed in two recent research-based advisory reports for the Dutch Health Ministry. The process and outcomes of these studies are briefly described in the present article. Demography, digital technologies and a new concept of health urge a radical shift in perception, learning and action in health care education, a call well-received throughout the country.

Key Words: Health workforce education, Quality of healthcare, Innovation, Digital health

1. INTRODUCTION

Demands on health care systems are changing and the health care work force landscape is adjusting accordingly. What should we do now to prepare health professionals for challenges in future health care demand in order to ensure accessible, affordable, high-quality care and social support? In the Netherlands, this question was addressed in two recent research-based advisory reports assigned by the Health Ministry. The first discussed necessary changes to the structure of health care professions^[1] while the second reported on major drivers for a paradigmatic shift in perception, learning and action with regard to health care education.^[2] Both reports encompass the full health care spectrum: hospital care, mental health care, long-term care, public health, general practices, youth care and social care.

Health care professionals obviously play a vital and essen-

tial role in keeping our health care systems sustainable and ready to meet future challenges. Demographic and economic trends raise concern over the readiness and condition of the health workforce. At a global level this is recognised by many international bodies^[3] and initiatives, such as the International Network for Health Workforce Education.^[4] It is also addressed in strategic policy documents, including the new draft of the “Global strategy on human resources for health: Workforce 2030”,^[5] the “Health Workforce Policies in OECD Countries: Right Jobs, Right Skills, Right Places”,^[6] or the “Commitments to action”.^[7] In several countries facing similar questions, there were innovative initiatives such as the NHS Framework for Health Education.^[8]

In September 2017, the WHO Regional Committee for Europe unanimously adopted a resolution and a framework for action whose aim is to transform the health workforce in this

*Correspondence: Hans C. Ossebaard; Email: hossebaard@zinl.nl; Address: National Health Care Institute, P.O.Box 320, 1110 AH Diemen, The Netherlands.

region to ensure that it is sustainable and able to respond to current and future health needs.^[9] The Dutch research project provides essential clues to accomplish this.

2. METHODS

Both reports consist of several substudies. Each study employs appropriate scientific methods to investigate a specific research question. Overall, a mixed-methods design strategy is utilised including a qualitative approach (e.g., literature search, stakeholder engagement, interviews, focus groups, expert meetings) as well as quantitative methods (epidemiology, predictive modelling). The baseline included an emerging new concept of health and national and regional forecasts of the changing demand for care towards 2030. This new concept of health emphasizes people's functioning as well as their ability to adapt, self-manage and cope with the physical, social and emotional challenges of life.^[10]

Two waves of focus group consultations were conducted consisting of 62 sessions (n = 647) altogether. Participants represented the respective stakeholder groups in health care e.g., patients, informal care givers, health care professionals, educators from all health care disciplines, insurers, researchers and policy makers. They reflected on the new concept of health, its consequences for the future of the Dutch health-care system and the structure of health care professions and education. At a regional level, stakeholders participated in four so-called "incubators". An "incubator" or a "breeding place" is an environment where new ideas, business start-ups or early innovations are developed, nourished and tried-out under favorable conditions of support with staff and equipment. The incubators served to identify and analyse good practices of productive and trendsetting cooperation between educational institutions and health care.

All discussions were recorded, anonymised and transcribed into summary reports that were checked for accuracy by the participants. An automated content analysis was conducted involving a systematic process of sifting, charting and sorting. Think-tanks with different stakeholders and experts were organised to discuss and follow-up on the results of the focus groups. Furthermore, an expert team reflected on technological developments in relation to health care. This thorough interaction with stakeholders and experts implied an iterative step-by-step process, using progressive insight in each new phase in alignment with existing innovations in health care practice and education. It provided subsequent recommendations with a widely-shared ownership.

3. RESULTS

Due to falling fertility rates and increasing life expectation, the fastest-growing age group in the Netherlands is over-80s.

In 2030, more than two-thirds of people over 65 years will have more than one chronic condition^[11] while many will experience problems in physical and/or cognitive functioning.^[12] Nonetheless, many older people will tend to stay longer at home and wish to live an independent life.

The digital revolution changes everyday life, health and health care. Thanks to online and mobile applications, "consumer eHealth" rises and merges with professional eHealth.^[13] The evidence-base is gradually growing. More people will be better informed about their health and could better self-manage their illnesses supported by eHealth technologies. These will increasingly be applied in prevention, cure and care.^[14] Once less fragmented and used at a larger scale, this will enable forms of personalized care in the domestic environment, requiring new professional roles and skills.

Having a chronic disease does not necessarily mean that one is no longer able to function. Recognising this, the committee distanced itself from the 1947 WHO definition of health and adopted a new concept of health as formulated by Huber et al.^[10] that acknowledges people's ability to adapt, self-manage and cope with the physical, social and emotional challenges of life. This means that the emphasis shifts from how citizens are hindered in their functioning by diseases, disabilities and health complaints to how people function in their daily lives.

In their first advisory report the committee describes the new arrangements of care and welfare that strengthen people's abilities to adapt and self-manage. Quickly evolving information and communication technologies play a pervasive and enabling role. More complex care demand requires that such arrangements be managed by multidisciplinary teams with mixed skills that work across sector boundaries.

No new professions are needed, but rather a new range of skills and values to meet future health care demands are needed. Digital technology, both in health care and education, profoundly affects these skills and values and continuous learning and knowledge sharing becomes more important. A "new professionalism" will rise. This is defined by a combination of digital health care, specific expertise, the aptitude to cooperate and the ability to learn.

The second report identifies eight themes based on these new concepts of health and professionalism (see Table 1). Each theme implies a corresponding set of outcomes to be achieved in the concerted action of stakeholders that cooperate in regional networks.

Professionals and citizens need to prepare for future challenges in health and care. These will take place not only

within the school system but also in the social and domestic environment. While formal and informal care intertwine, hybrid and flexible varieties of care, assistance and support emerge. Informal carers, volunteers and communities will be operating these new forms using digital technologies for information, participation and communication.

Table 1. Themes and outcomes for future health care education

Themes	Outcomes
1. Citizens' functioning and their ability to adapt and self-manage their health	Professional expertise contributes to the promotion, recovery and support of citizens' functioning and their ability to adapt and self-manage.
2. Citizens will develop learning skills and health-related skills from an early age	Focusing on these key issues demands that not only professionals but also citizens should be equipped. Where necessary they must be supported, largely in networks, in caring for themselves and for one another. Informal carers, volunteers and communities will be operating these new forms using digital technologies for information, participation and communication. This requires minimizing digital and health illiteracy and will make considerable demands on primary and secondary education.
3. Citizens' functioning and their ability to adapt and self-manage are the leitmotif of learning pathways	Education in health care, from intermediate and higher vocational and scientific education up to adult education and on-the-job training, will take the perspective of citizens' functioning by a common underlying biopsychosocial model, for example the International Classification of Functioning, Disability and Health. A common model contributes to the ability to collaborate in multidisciplinary teams with mixed skills.
4. Daily practice in education and education in daily practice	The ability to collaborate will be developed in practice and education as future professionals will become acquainted with practical situations right from the start of their studies by incorporating daily practice in education and education in daily practice.
5. Consistent and coherent learning pathways in a continuum	The ability to collaborate will also take place by developing consistent and coherent learning pathways throughout all educational levels and disciplines. Common frameworks will result in courses with a broader and stronger core content and differentiation in graduate profiles (T-shape).
6. Permanent mutually learning in teams, organisations and networks	The ability to learn is essential for professionals. Adult education and ongoing training by mutually learning will adapt to the rapid changes and the need of life-long learning to maintain professional expertise. This requires an encouraging learning environment.
7. Living, learning and working with technology	The ability to learn is essential, in particular when it comes to rapid developments in technology. In turn, technology will contribute to mutual learning in networks.
8. Connecting research, education, daily practice and policy	Permanent knowledge sharing through a sustainable connection between research, education, daily practice and policy will contribute to the development of knowledge and expertise and will encourage and speed up innovations.

4. DISCUSSION

The research trajectory resulted in several recommendations. Both advisory reports acknowledge transitions in health care, welfare and education that have already started. However, a supporting and facilitating policy and sustainable interactive knowledge development and knowledge-sharing are greatly needed. Such a policy aims to coordinate innovative exemplary initiatives and collect, evaluate or share them. It encourages experimentation and seeks to remove obstacles in current legislation. Thus, national policies facilitate regional networks of stakeholders from education and health care. This is deemed to be a matter of national interest.

One over-all recommendation derived from the in-depth consultation of stakeholders is to initiate a program for a national framework of cooperation with regard to policy, operation, education, inspection and finance concerning future health care and welfare. The "incubator"-method proved to be an effective way of working. Therefore, another recommenda-

tion is to concentrate efforts of existing initiatives in order to achieve more coherence, efficacy and strength and to embed them into policies and practice. These recommendations align with current international expert opinion. The chairman of the Organizing Committee for the WHO Fourth Global Forum on Human Resources for Health (November 2017, Dublin) assumes, "It will require new ways of thinking about the health workforce, new ways of training people and new ways of managing patients. We will have to be a bit radical in our approach if we want to create an effective and sustainable workforce by 2030".^[15]

Both reports were framed as recommendations "from, by and for the world of health care and welfare".^[1,2] Today they rely on a broad and active support of citizens, professionals, administrators, educators and local councils. They are designed to provide the basis for Dutch investment in the health and care workforce in the coming fifteen years.

Key points

- (1) In order to be ready to meet health care demands in 2030 and provide high-quality, accessible and affordable care in The Netherlands, new forms of care and welfare, professions and education must be developed. This is a matter of national interest deserving a national programme.
- (2) A new biopsychosocial view on health and well-being gradually replaces the WHO-concept of health (1947). It emphasizes how people function, their ability to adapt and self-manage and therefore better matches contemporary trends and demands.
- (3) Digital technologies play an increasingly important role in both care and welfare delivery and health education in the near future. They assist healthy living and self-management in the home environment. They support a new professionalism in care and well-being.
- (4) This new professionalism is characterised by cohesion between expertise, the ability to cooperate and the ability to learn.

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CONFLICTS OF INTEREST DISCLOSURE

The authors declare that there are no conflicts of interests.

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