Implementing the Health Promoting University approach in culturally different contexts: a systematic review

Mónica Suárez-Reyes[1] and Stephan Van den Broucke[1]

Abstract:
Introduction: Universities represent a valuable opportunity to promote health and well-being. Based on the setting approach, the Health Promoting Universities concept has been developed in different countries and contexts. However, the implementation process remains poorly documented. This systematic review aims to describe how universities have implemented the Health Promoting University concept in different cultural contexts.
Methods: Pubmed, Medline, Lilacs and Scielo were searched for articles on Health Promoting Universities, published between 1995 and 2015. Studies detailing the implementation of a Health Promoting University approach were included. Selected articles were content analysed paying attention to: (a) the definition of a Health Promoting University; (b) priority areas of action; (c) items of work; (d) coordination of the project; (e) evaluation; and (f) adaptation to the cultural context.
Results: Twelve studies were identified for in-depth analysis. Of those, three were theoretical papers, and nine were intervention studies. The programmes described in the selected studies are mostly based on the guidelines of the Edmonton Charter. They incorporated the main areas of action and items of works proposed by the Health Promoting University framework. The implementation of healthy policies and incorporation of health promotion in the curriculum are remaining challenges. Strategies to facilitate adaptation to context include: stakeholder participation in planning and implementation, adaptation of educational material and analysis of needs.
Conclusions: The review suggests that most of the universities work towards similar goals, relying on the Health Promoting University framework, yet that the way in which initiatives are implemented depends on the context. (Global Health Promotion, 2016; 23 Supp. 1: 46–56).

Keywords: healthy university, implementation, cultural adaptation, systematic review

Introduction

Universities are organisations where many people spend a significant part of their time. The individuals who make up the university community (students, professors, technicians, administrative staff, etc.) are, or will be, professionals, politicians and leaders in different areas of society, and may directly influence society with their habits, beliefs and attitudes. In 1986, the Ottawa Charter claimed that health is built where people live, play and love (1). Accordingly, the university setting represents a valuable opportunity to promote health and well-being (2).

Several universities have assumed this commitment to health, but only a minority have adopted a whole systems approach following the Health Promoting Universities concept (3–7). This concept was

1. Psychological Sciences Research Institute, Université catholique de Louvain, Belgium.

Correspondence to: Mónica Suárez-Reyes, Psychological Sciences Research Institute, Université catholique de Louvain, 10 Place Cardinal Mercier, 1348 Louvain-la-Neuve, Belgium. Email: monica.suarezreyes@uclouvain.be

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launched nearly two decades ago, and draws on a number of different experiences, including settings-based interventions such as health-promoting schools, workplaces and hospitals, and the expertise of the WHO Healthy Cities Project Office.

The Health Promoting University concept has a strong theoretical basis, and it appears appealing amongst universities worldwide. However, the way in which the approach has been implemented remains poorly documented. This systematic review aims to describe how universities have implemented the Health Promoting University concept in different cultural contexts. In order to achieve this aim, we analysed the following aspects of the implementation of the Health Promoting University: (a) definition of Health Promoting University; (b) priority areas of action; (c) items of work; (d) coordination of the project; (e) project evaluation and possible results; and (f) adaptation to the cultural context.

The conceptual framework of Health Promoting Universities

As an application of the healthy settings approach to higher education institutions, the Health Promoting Universities framework has been developed over the past decades through milestone events such the International Conference on Health Promoting Universities held in 1996; the publication of the guidelines for establishing Health Promoting Universities by WHO-Euro in 1998; and the Edmonton Charter for Health Promoting Universities of 2006 (3,5). The framework states the objectives that must be pursued to build a Health Promoting University, and mentions what the expected outcomes should be.

The objectives of a Health Promoting University are: (a) to promote healthy and sustainable policies and planning throughout the university; (b) to provide a healthy working environment; (c) to support the healthy personal and social development of the persons involved; (d) to establish and improve primary health care; (e) to ensure a healthy and sustainable physical environment; (f) to encourage wider academic interest and developments in health promotion; and (g) to develop links with the community (3,8). The results of a Health Promoting University programme should demonstrate the extent to which health has been integrated in the culture, structure and processes of the university; and the extent to which the health of the members of the university community improved. The implementation of the key objectives may be described in terms of process and impact, rather than outcomes, whereby collaboration and networking are key elements (4,5). Moreover, universities can also demonstrate improvements in terms of service, academic performance, and providing conditions for good health.

Health Promoting Universities in culturally different contexts

The Health Promoting University approach was first promoted in England in the mid-1990s. Since then, initiatives have been developed in other countries in Europe, Asia, and Latin America (9–14). As countries and cultures differ, the context for implementing the approach also varies widely. Since health promotion interventions are more effective when they are adapted to context (15), Health Promoting University initiatives should be adapted to local culture and organisational characteristics (16).

Culture refers to behavioural patterns, beliefs, art and every product of human work and thought, as expressed in a particular community. Adapting an intervention to the culture is a process known as *cultural tailoring*. In this process, culturally sensitive interventions are created by adapting existing materials and programmes to meet the needs of the population (15). There are two levels of cultural sensitivity: (a) *surface culture* involves matching the materials and messages to observable 'superficial' (although important) characteristics of a population, e.g. familiar people, places, language, music, food and locations; (b) *deep culture* requires an understanding of the cultural, social, historical and psychological forces that influence the population. Whereas surface culture only increases the acceptance of programmes, deep cultural factors influence their effectiveness (17).

In accordance with these distinct levels, different strategies can be used to make programmes more culturally sensitive. One strategy is to adjust language and use familiar images or places for the members of the university (surface culture). Such modifications would improve the acceptance of the programme (17). Another strategy is to recognise

and reinforce the values, beliefs and behaviours of the university community (deep culture).

Implementation fidelity versus adaptation and empowerment

While health-related programmes are thought to be more effective when they are adapted to the target population, the question is how to change the programme without losing its core content. For instance, is an initiative still a Health Promoting University programme when not all core objectives are included? This relates to the notion of *implementation fidelity*, or the degree to which an intervention is delivered as intended (18). According to the notion of 'fidelity', any change that is made to a programme may be considered as a threat to its quality and effectiveness. However, this view goes against the importance that is attached in health promotion to stakeholder participation in programme planning, implementation and evaluation (1).

One possibility to reconcile the need for adaptation and cultural tailoring with the need to keep the core content of a programme intact is to use the *empowerment implementation* approach (19). This approach proposes to equip members of the target community with the tools to identify the essential programme components, allowing the programme to be adapted to the culture while maintaining its quality and effectiveness. Moreover, community members are empowered through the participatory implementation process, which is an important additional benefit.

Methods

Literature search and selection

To identify relevant published work on the implementation of the Health Promoting University approach, a search of PubMed, Medline, Lilacs and Scielo was performed in February and March 2015. The search terms used were 'Healthy University/ies' OR 'Health Promoting University/ies' in either the title or the abstract. To select relevant publications, the following inclusion criteria were used: (a) full text available in English or Spanish; (b) published between 1995 and 2015; (c) explicit reference to higher education or university; (d) focus on the improvement of health and well-being for the whole university; and (e) description of the implementation process of a Health Promoting University initiative. Studies were excluded when they: (a) focused on the improvement of health and well-being of only a particular group of the university (students or staff); or (b) did not refer to the process of implementation of the Health Promoting University approach.

Using the aforementioned procedure, 691 entries were identified from electronic databases. However, the majority did not focus on the whole university community, or used strategies aimed at a particular group. In total, after applying the inclusion criteria, 12 articles remained (Figure 1). Of those, three were theoretical papers, and nine were intervention studies. The theoretical papers were included in the review because they contained recommendations for the implementation process of Health Promoting Universities. Across publications, both the terms 'Healthy University' and 'Health Promoting University' were used, while one intervention study used the term 'Health Promoting School' (20) but concerned a higher education institution.

Analysis

Articles that met the inclusion criteria were separated into theoretical papers and intervention studies. The analysis of theoretical documents was done for each document separately, while that of intervention studies was done jointly. For both types, the selected articles were content analysed paying attention to the following: (a) definition of Health Promoting University; (b) priority areas of action; (c) items of work; (d) coordination of the project; (e) project evaluation and possible results; (f) adaptation to the cultural context. Information extracted from the articles was summarised in tables. Data extraction from the selected articles was done by the first author.

Results

Theoretical papers

Three theoretical papers that dealt with the implementation of the Health Promoting University concept were found in the literature. The first one was a glossary addressing key concepts associated with Health Promoting (or Healthy) Universities (21), defined as '*an institution that includes health*

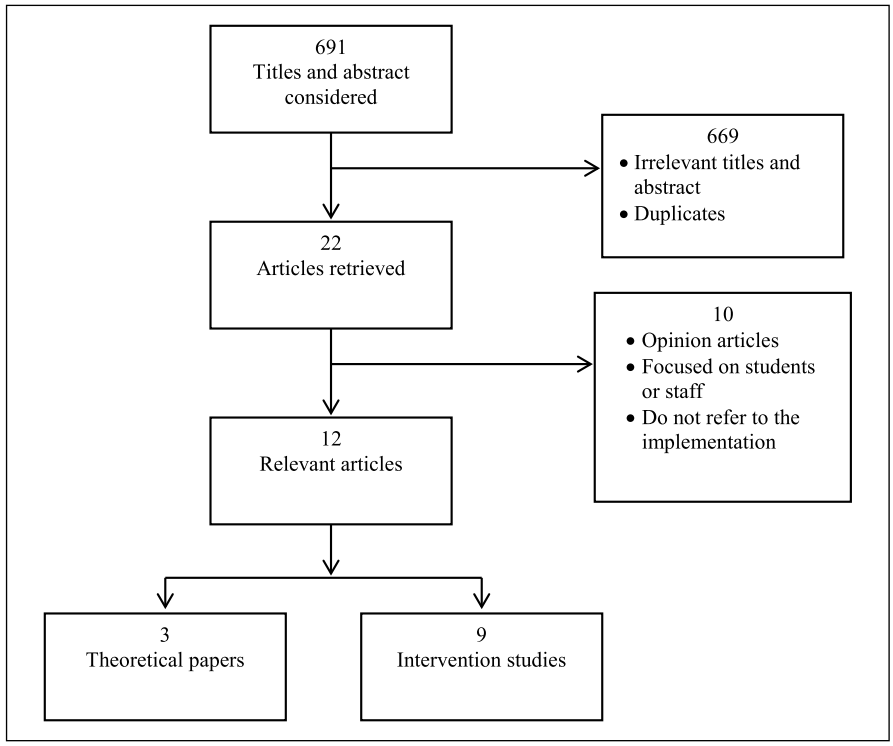

Figure 1. Flow chart of the selection process.

promotion within their educational project to improve the health of their community members'. Actions that were proposed included: information and awareness-raising on health issues, online educational activities, institutional changes and improvement of the physical environment. The glossary highlighted the importance of developing healthy policies that integrate the concept of healthy lifestyle in the curriculum and institutional culture. Evaluation was recognised as an important but complicated process, the success of which depends on the physical-environmental context and available human resources.

The second document was developed by the Ministry of Health of Peru as an implementation guide for Healthy Universities (22). It referred to a Healthy University as '*an institution that implements health policies, encourages learning for health, and promotes the participation of all those involved in the decision making process*', and described it as also contributing to the eradication of poverty, hunger, maternal mortality, and other health challenges. The proposed actions included: the creation of a culture of health for the student formation; development of healthy environments; and the implementation of healthy policies. Although the importance of evaluation was mentioned, no guidance was provided on how to carry out an evaluation of a Healthy University.

The third document was a guideline for the development of a Healthy University, developed by two universities in Chile with the support of WHO and PAHO (2). It defined a Health Promoting University as '*an institution that is committed to creating an environment and culture that encourages health and well-being of all its members*'. Proposed actions included: the implementation of healthy policies; the creation of an organisational structure to coordinate all actions related to health; the integration of health courses in the curriculum; and the provision of a healthy physical environment. This guideline recommended that the highest

university authority should lead the strategy, and that there should be a coordinating team and a working group involving different members of the university community. Evaluation was recognised as useful to improve and redesign the programme, but details on how to evaluate a Health Promoting University were not given.

Intervention studies

Nine intervention studies describing the implementation of the Health Promoting University concept were identified in the literature. One study reported the findings of a national-level qualitative study carried out in England, providing a summary of the activity developed by various institutions (23). The other eight each described one intervention. The information extracted from these studies is summarised hereunder.

- ***Definition of Health Promoting University*** – All studies proposed a definition of Health Promoting University, Faculty or School (Table 1). Across studies, a Health Promoting University was defined as an institution that: provides a supportive environment for health; integrates health in their educational project; protects health and promotes the well-being of all community members through healthy policies. Some studies added that a university is based on the values of respect and solidarity.
- ***Areas of actions*** – In all studies, establishing Health Promoting Universities entails several areas of actions (Table 2). Seven studies mentioned the development of personal skills and knowledge regarding health, the creation of healthy environments and the incorporation of health issues in the curriculum (4,8,10,14,20,24,25). Six studies mentioned the development of healthy policies (4,8,14,23,24,26); and four studies mentioned activities with the local community (8,14,23,24). The continued provision of health services was named in two studies (14,20), and in two studies the subject of healthy workplaces was also addressed (8,24). In one study, research was also considered an area of action (23).
- ***Items of work*** – These are the health topics that are addressed in the context of a Health Promoting University. The prevention of alcohol and drug abuse was mentioned most often, in seven of the nine studies (4,10,20,23–26); six studies mentioned activities focused on mental health (4,8,14,23–25), healthy eating (10,14,20,23,25,26), and sexual health and STD/AIDS prevention (8,10,14,20, 23,24). Road safety and transportation were mentioned in four studies (8,23,24,26), and three studies mentioned physical activity (14,23,25), and smoking cessation and promotion of smoke-free spaces (14,25,26). The prevention of chronic diseases was mentioned in two studies (20,26). Other issues mentioned included building design (8,24), oral health (20), family-studies relationship (20), academic performance (20) and healthy sleep (10).
- ***Coordination*** – In five studies, the faculties of medical sciences or related careers led the Health Promoting University programme (4,10,20,24,25). One study mentioned that the project was an initiative of the university authorities (26). Another study indicated that the project was a collaboration between governmental agencies supported by the WHO (14). Other services in charge were the human resources/occupational health, department academic, student services and sports (23). The presence of a steering group was mentioned in seven studies (4,8,14,23–26), five of which had representatives from different members of the university community (8,14,23,24,26).
- ***Evaluation*** – While the importance of evaluation was acknowledged in all studies, details on the type of evaluation performed were provided in only six studies (10,14,20,23,25,26). Most evaluations involved the use of questionnaires or interviews with students, teachers and/or workers (10,14,20,23,25,26). Questionnaires were used either to measure modifications in knowledge and health-related behaviours, or to identify needs and opinions about different aspects of the project. Only three studies reported the results of the evaluation process (8,14,24), observing improvements in the well-being of members of the university community and in the physical and social environment. An increase in health-related knowledge and decrease in harmful behaviours among students were also reported in these studies.
- ***Adaptation to the context*** – Six of the nine studies provided information regarding the adaptation to the cultural context, with a view to

Table 1. General characteristics and definition of Health Promoting University according to the different studies.

Reference	*Country*	*Name of the project*	*Starting date*	*Concepts*
				A Health Promoting University is one that…
Dooris (2002)	England	Health Promoting University	1995	Seeks to develop a political context for an environment that supports health. Allows students to gain knowledge to make their own informed decisions. Finds a commitment of the university authorities.
Xiangyang (2003)	China	Health Promoting University	From 1997 to 2000	Protects the health and promotes the well-being of students, staff and the wider community through their policies and practices. Relates health promotion to teaching and research. Develops health promotion alliances and outreach into the community.
Granados (2009)	Colombia	Healthy University	2003	Develops actions to promote health. Encourages active participation of the community.
Dooris (2001)	England	Health Promoting University	1995	Integrates within the university's culture a commitment to health. Promotes health and well-being of staff, students and the wider community.
Dooris (2010)	England	Healthy University, Healthy Campus, Health Promoting University, Healthy U	Different initiatives began between 1995 and 2008	Promotes health in a specific group like students or workers. Raises the profile of health within the culture, structures and processes of the university.
Knight (2013)	England	Healthy University	2011	Integrates health and health promotion into the university culture. Adapts university policies, processes and structures to promote health.
Baños (2001)	Cuba	Health Promoting School	Not mentioned	Is based on conviviality, respect and solidarity. Understands that health is the result of many environmental, social and individual factors.
Becerra, F. (2011)	Colombia	Health Promoting University	2009	Incorporates health promotion into the educational project. Promotes human development to improve the quality of life for all its members.

Table 1. (Continued)

Reference	*Country*	*Name of the project*	*Starting date*	*Concepts*
				A Health Promoting University is one that…
Becerra, S. (2013)	Peru	Healthy University	2011	Provides a healthy environment and incorporates health issues in its curriculum. Promotes compliance with public health policies. Provides information on healthy lifestyles.

Table 2. Description of the aspects of implementation of Health Promoting University in the different studies.

Reference	*Country*	*Areas of action*	*Items of work*	*Coordination*	*Evaluation*
Dooris (2002)	England	The policy process; student development; healthy workplace; healthy environments; academic development; health of the wider community.	Mental well-being; sexual health; building design; transport; drugs.	Faculty of Health.	Yes.
Xiangyang (2003)	China	University policies; health supporting environments; personal skills; health services; actions with the community.	Smoking control; mental health; STD/ AIDS prevention; sexual health; physical exercise and healthy diet.	Health and education authorities of Beijing. Supported by the WHO.	Yes. Qualitative/ formative and quantitative/ summative.
Granados (2009)	Colombia	Institutional articulation; integration of health in the educative programme; prevention of diseases.	Healthy diet; smoking control; alcohol; prevention of chronic diseases; security; traffic safety education.	University Vice presidency.	Yes. Quantitative/ summative.
Dooris (2001)	England	The policy process; student development; healthy workplace; healthy environments; academic development; health of the wider community.	Sexual health; building design; transport and mental well-being.	Faculty of Health in partnership with other faculties and services.	Yes.
Dooris (2010)	England	Healthy policy; healthy environments; curriculum; research; social support systems; organisational culture; relation with the community.	Mental well-being; physical activity; healthy eating; alcohol; sexual health; smoking control; drugs; sustainability and transport.	Human resources/ occupational health, academic departments, student services and sport.	Yes. Qualitative/ formative and quantitative/ summative.
Knight (2013)	England	Integration of health promotion across all schools and departments; personal skills related to health; healthy environments; and partnership with the community.	Mental well-being; isolation and drinking; work/life balance.	School of Health and Social Care.	Not reported.

(continued)

Table 2. (Continued)

Reference	*Country*	*Areas of action*	*Items of work*	*Coordination*	*Evaluation*
Baños (2001)	Cuba	Healthy environments; self-care education; curricular changes; prevention of diseases.	Healthy diet; cardiovascular risks; alcohol; oral health; sexual health; academic performance.	Faculty of Health.	Yes. Quantitative/ summative.
Becerra, F. (2011)	Colombia	Curricular changes; health education; healthy environments; integration of health across all faculties.	By the moment healthy eating habits. In the future the aim is to work also on physical activity; alcohol; smoking control; drugs; mental well-being.	Career of Nutrition and the Student Health Department.	Yes. Qualitative/ formative and quantitative/ summative.
Becerra, S. (2013)	Peru	Health education and healthy environments.	Mental well-being; sexual health; healthy diet; smoking control; drugs; healthy sleep.	Department of Psychology, department supported by the Academic Direction of Social Responsibility.	Yes. Qualitative/ formative and quantitative/ summative.

make the programme more culturally sensitive (8,10,14,23,24,26). Actions mentioned in this regard were the involvement of students and of academic and non-academic staff in the planning and implementation of the initiative. Four studies highlighted the participation of volunteer students in the implementation through peer education projects on issues such as sexual health and drug use (8,14,23,24), thus ensuring greater credibility and acceptability by the rest of the university community. The development of health education material tailored to problems encountered by the university community was mentioned in four programmes (8,10,14,24). In three programmes, information on the needs of those involved was collected through a diagnostic process in an effort to adapt the programme to the cultural context (10,23,26).

Discussion

This literature review provides insight in the way in which the Health Promoting University concept has been implemented by universities and adapted to the cultural context. While there is a vast literature on interventions aimed at university students that focus on a single health issue (27), only a small number of studies could be found that describe the implementation of programmes focusing on the entire university community through a whole systems approach.

This review includes initiatives developed mainly in England and Latin American countries. Other European countries, such as Spain and Germany, have also developed actions on Health Promoting Universities, although a European network has not yet fully materialised. In Latin America, on the other hand, the 'Iberoamerican Network of Health Promoting Universities' (RIUPS in Spanish) brings together several countries, including Spain. This network has been working for over 10 years in the development of Healthy Universities (28). Initiatives have also been developed in other countries such as China (14) and Thailand (13). However, the reasons why the Health Promoting University initiative has been developed more strongly in some countries than in others have not been fully studied.

Implementing the Health Promoting University concept

The programmes described in the studies included in the review are mostly based on the guidelines of the Edmonton Charter (5), and incorporate the main objectives and actions of the Health Promoting University proposed by Dooris (8), as well as the success factors proposed by Xiangyang (14). However, while both authors agree that the most important action is the development of a healthy policy, three of the initiatives included in the review do not reach a full implementation of this goal (10,20,25). Since a policy provides a basis for all subsequent actions (24) and ensures the sustainability of the initiative (2), failure to develop a healthy policy can negatively affect all other efforts to become a Health Promoting University. Universities that do not implement this component are universities that develop health promotion activities, rather than Health Promoting Universities.

The items of work that are addressed through the Health Promoting University initiatives are very similar across universities, showing that universities focus on the most common health problems of young people (29,30). In some cases these topics were chosen as a result of a social and epidemiological diagnosis, which allows optimisation of resources and a focus on specific problems encountered by the university community. This way of working may also be instrumental in adapting the programme to particular needs defined by the cultural context, and make the programme more culture sensitive.

The programmes included in the review were most often coordinated by faculties of medical sciences. This may be because those in health-related careers recognise it as their duty to support the health of the university community (31). The challenge for the health faculties is to convince the university authorities of the responsibility the university has with regard to health promotion (2). This is important, because the alignment of the top-down commitment of university authorities with bottom-up action is essential for a Health Promoting University programme (24). Only a few studies in our review had representatives from different groups of the university community in the steering group. Actively involving members in the planning, implementation and evaluation of the programme is nevertheless important, as it allows the intervention to be adapted to the specific cultural context. Moreover, by equipping stakeholders with the know-how and tools to identify and implement the essential programme components and coaching them in the implementation process, members of the community can be empowered to take on future projects themselves while staying faithful to the Health Promoting University principles, as proposed in the empowerment implementation approach (19).

To evaluate the programme, most studies assessed the modification of health-related knowledge and/or behaviours, typically using interviews and questionnaires. Effects at a more systemic level, such as the creation of a health-promoting environment or the integration of health within the university culture, are less often assessed. This may be due to the inherent difficulty of assessing initiatives using the healthy setting approach (21). However, it is important to remember that the objective of a Health Promoting University is to improve the health of its members and integrate health within the university culture. Both are long-term processes, the results of which cannot be observed immediately (3). Further studies on the evaluation and effectiveness of Healthy Universities initiatives are needed.

Compliance with the Health Promoting University objectives

To guide the work of universities that have made a commitment to health, the objectives of the Health Promoting University established in the strategic framework (3) provide a sound basis. Successful compliance with these objectives means that a university can be considered a Health Promoting University. In the initiatives presented in this review, compliance with certain objectives is better in some universities than others. Providing opportunities for a healthy environment and developing personal skills and knowledge regarding health are objectives for which most universities have made important efforts. On the other hand, the implementation of healthy policies, incorporating health promotion in curriculum development across all faculties, and developing links with the community remain challenging in three of the studies (10,20,25). These initiatives, which have found it more difficult to comply with all the objectives, have in common that the interest to develop the Health Promoting

University programme came from a particular group in a faculty or department. It appears that in this scenario, fulfilling all objectives of a Health Promoting University is more challenging.

Cultural sensitivity of the programmes

To facilitate cultural adaptation, most studies included in this review involved members of the university community in the programme planning and implementation, and adapted educational materials to the context, while some also performed a needs analysis. These measures represent a surface structure of cultural sensitivity with a view to improve acceptance of interventions (15,17). Adaptations according to culture, religion or other deep structures were not mentioned. Sirakamon *et al.* (13) agree that cultural aspects have not been fully considered in Health Promoting University implementation. In that study, the authors propose that adaptations according to the values, beliefs and culture might improve the effectiveness of the project.

An example of the importance of features of the context for implementation was given by Xiangyang *et al.* (14), who mentioned that the peculiarity of the administrative system of universities in Beijing facilitated the process, but also recognised that in universities with a different administration the results might be different. Another study found that the presence of a national health policy, the organisational culture and the physical environment were also influential factors (32).

Conclusion

Despite the few studies found, as far as we know, this systematic review is the first to describe the implementation of the Health Promoting University concept in universities from different cultural contexts.

The results show that the majority of these universities work towards similar goals, relying on the framework for Health Promoting Universities. However, for some of these objectives the implementation can be challenging. Whereas the concept of the Health Promoting University was developed in a western European context, it is important to consider the factors that also make this initiative successful in different contexts. The adaptation of the Health Promoting University concept to the specific characteristics of culturally very different contexts seems to be one of them. In the few published studies that explicitly describe the implementation of the Health Promoting University approach, only adaptations of superficial cultural aspects were identified. Adaptations paying attention to deep cultural factors such as history, religion or social context may maximise the potential of the Health Promoting University initiative. Participation of members of the university community in the planning, implementation and evaluation process is also particularly valuable. More studies focusing on these context-dependent modifications would be more than welcome.

Finally, for these initiatives to continue developing, the political support of the authorities and the scientific and academic body is required. On the one hand, political support would need to incorporate the promotion of health in all areas and university services. On the other hand, the role of the academic and scientific community is to strengthen the exchange of results and experiences, to achieve the goal of identifying models of good practice.

Conflict of interest

The authors declare that there is no conflict of interest.

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