

The United States CHES Program: The Role and Development of the Modern Health Educator

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<Abstract>

Objectives: The field of health education is still relatively new and is therefore evolving and developing rapidly throughout the world. Many countries' certification programs are still being created. This paper will discuss on the US CHES system of regulation, accreditation, and implementation for the future development of international health education programs. **Methods:** This article focuses on the United States CHES credentialing program, specifically on its historical development and the roles, employment settings and socioeconomic demographics of current CHES professionals through literature review. **Results:** The roles and skills required vary by employment setting, with seven universally recognized responsibilities of health educators. There are also 35 key competencies which are crucial to the role of the health educator, with 163 sub-competencies performed by all health educators. The employment of health educators will increase from 62,000 in 2006 to 78,000 in 2016. As the costs of healthcare increase, employers are projected to hire more health educators to decrease healthcare costs through prevention and early detection of chronic illnesses. Community health non-profit agencies, academia, healthcare (hospital/clinic), schools, government/government contracting, and businesses are some of the most widespread employment settings for health educators in the United States. **Conclusion:** Better understanding of this longstanding and successful program will benefit countries developing their own certification system. The variety and specificity of the information on the US CHES program may be of value as South Korea continues to develop its Korean CHES program.

Key Words: CHES, Health education, Credentialing program

I. Introduction

Health education as a formally recognized field is still relatively new. Early academic programs first developed in the United States in the late 1800s, but a system of credentialing did not appear until the mid 1900s (Stewart, 2006). The global concept of health educators is still being formed (Barry, 2009; Taub, 2001), with many countries continuing to develop the profession of health educator. The Republic of Korea is one such country that has recently made significant changes in the health educator system, with the creation of a national accreditation system.

Beginning in 2010, the Republic of Korea introduced the

Korean Certified Health Education Specialist (CHES) certification. Endorsed by the government and gaining support from employers and colleges, the CHES certification qualifies professionals at 3 levels of ability (level 3 [entry] to level 1 [requiring a graduate degree]), which creates a more complex accreditation system. However, this system is still new and has yet to be successfully integrated into the employment field.

The Korean CHES certification program was based, in part, on the United States Certified Health Education Specialist (CHES) certification program. The US CHES certification program began in 1988 with the creation of the NCHCEC (the National Commission for Health Education Credentialing, Inc.) (DeGroft, 1998). Since that time, the NCHCEC has made several

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significant revisions, thus developing and revising the competencies and sub-competencies, and creating a Master's-level CHES (MCHES) for advanced-level certification (MCHES Frequently Asked Questions, 2010).

There are approximately 8,000 active CHES-credentialed professionals in the United States (Bonaguro, 2009). The CHES-credentialed professionals are employed in a variety of fields and specialties, from hospital staff to government workers, with an annual income varying from \$12,000-\$250,000 (Bonaguro, 2009; Lux, 2009; Stewart, 2006).

Understanding the development of the CHES program and CHES-credentialed professional in the United States is beneficial to the Republic of Korea and other countries whose programs are still growing. This article focuses on the development of the CHES program in the United States and the identity and role of the CHES-credentialed health educator, with a focus on compensation and the workplace setting. The lessons to be learned from developing and improving the CHES programs have been examined. The US CHES system of regulation, accreditation, and implementation are further delineated and discussed so that this article may prove to be a resource for the future development of international health education programs.

II. History

The profession of health education arose in the United States in the 1800s, but did not become fully developed until the mid

1900s. In 1943, the first guideline for the education of health educators was created (Airhihenbuwa, 2005). In the 1950s, the Society for Public Health Education (SOPHE) began to more fully develop standards for the education of Health Education professionals, culminating in the publishing of the "Guidelines for the Preparation and Practice of Health Educators" in 1969, which designed clear guidelines for undergraduate and Master's level education (Airhihenbuwa, 2005; Sakagami, 2004). The American Association of Health Education (AAHE) later joined with the SOPHE to continue developing the guidelines.

In the 1970s, the American Public Health Association began an accreditation program for some Master's health programs (Sakagami, 2004). In 1978, based on the recommendations of the First Bethesda Conference, Helen P. Cleary, one of the most influential people in the development of professional standards in health education, helped found the National Task Force on the Preparation and Practice of Health Educators (Sakagami, 2004; Stewart, 2006). This National Task Force later developed into the NCHEC (Table 1; Sakagami, 2004; Stewart, 2006).

At that time, the responsibilities, skills, and knowledge base of a health educator began to be delineated. This Role Delineation Study reported that there were commonalities across health educator employment settings and culminated in the publishing of "A Framework for the Development of Competency-Based Curricula for Entry-Level Health Educators" (Airhihenbuwa, 2005; Stewart, 2006). This document provided a framework for educational programs to develop health educator curricula.

<Table 1> Development of the CHES program

Year	Major Historical Events
1978	National Task Force on the Preparation and Practice of Health Educators (developed into CHES) founded
1980-1985	Role Delineation Study
1988	National Commission for Health Education Credentialing, Inc (NCHEC) created
1989	CHES credentialing begins
1990	CHES exam first given
1998-2004	Competencies Update Project (CUP) confirms competencies validity
2008-2009	Health Educator Job Analysis (HEJA) updates competencies
2010	MCHES credentialing begins; the first exam is planned for October 2011

The US CHES credentialing program began in 1988 with the creation of the National Commission for Health Education Credentialing, Inc. (NCHEC; DeGroft, 1998). The following year, NCHEC offered the first CHES certification through a brief charter certification phase, in which current professionals were able to become certified by providing appropriate documentation. In 1990, the first CHES exam was given (Stewart, 2006).

Graduate level competencies began to be explored more thoroughly in 1992 through the efforts of the AAHE and SOPHE. These organizations developed graduate-level competency standards, which were ratified by the NCHEC, SOPHE, and AAHE in 1997. After further work, *A Competency-Based Framework for Graduate Level Health Educators* was published in 1999 (Stewart, 2006). In 2006, the NCHEC surveyed health educators, 85% of whom were CHES-credentialed, about the feasibility of advanced-level certification. The respondents, approximately 60%-80% depending on demographics, believed that advanced-level certification would benefit the health educator profession (Dennis, 2007). The MCHES has just begun in the United States (MCHES Policy Statement, 2010). Introduced initially as the MCHES Experience Documentation Opportunity (EDO), those who have been CHES-credentialed for at least 5 years will be qualified to apply for MCHES status. NCHEC plans to offer MCHES exams beginning in October 2010.

The Competencies Update Project was conducted between 1998 and 2004 to verify the continued accuracy of the competencies for the entry-level health educator and develop and validate the competencies for the advanced-level health educator (Gilmore, 2005; Taub, 2008).

A 19-page questionnaire was sent out to a representative sample of members of national professional organizations, as well as a random sample of health educators for 16 states found using numerous other state and healthcare organization mailing lists. The adjusted response rate was 70.6%, with 4,030 participants (Gilmore, 2005; Taub, 2008).

The questionnaire was divided into three parts, assessing the importance of skills needed and the frequency the skills were used, the importance and time spent on each of the 10 areas of

responsibility, and demographic information (Gilmore, 2005).

Based on demographic information, the participants were divided into the following four employment settings: community; school/K-12; healthcare; and university/professional preparation. The assessed skills were mostly shown to be needed and frequently used. However, in a few cases in which the items received a low score by combining importance and frequency used from all four employment settings, these scores were removed from further consideration. Seventeen sub-competencies were dropped. Advanced-level competencies, based on 5-plus years experience and/or an advanced degree, led to a hierarchical model with some advanced level-specific sub-competencies. There were also some gaps that suggest advanced-level sub-competencies are still need in need of development (Gilmore, 2005).

In 2008 and 2009, NCHEC updated the competencies, responsibilities, and sub-competencies through the Health Educator Job Analysis (HEJA). The results have yet to be published.

The competencies developed through NCHEC and verified through CUP and other studies are accepted standards used for research and teaching (Davidson, 2008). CHES-credentialed health educators are recommended to schools because the credentialing verifies their understanding of these universally-accepted core competencies (Davidson, 2008).

III. Certified Health Education Specialist

1. Roles and Responsibilities

A health educator is “a professionally prepared individual who serves in a variety of roles and is specifically trained to use appropriate educational strategies and methods to facilitate the development of policies, procedures, interventions, and systems conducive to the health of individuals, groups, and communities” (Gold, 2000). The roles and skills required vary by employment setting, with seven universally recognized responsibilities of health educators (Gilmore, 2005; Sakagami, 20004; Stewart, 2006). There are also 35 key competencies

which are crucial to the role of the health educator, with 163 sub-competencies performed by all health educators (Gilmore, 2005).

The seven responsibilities are as follows (Gilmore, 2005; Sakagami, 20004; Stewart, 2006): responsibility I: assess individual and community needs for health education; responsibility II: plan health education strategies, interventions, and programs; responsibility III: implement health education strategies, interventions, and programs; responsibility IV: conduct evaluation and research related to health education; responsibility V: administer health education strategies, interventions, and programs; responsibility VI: serve as a health education resource person; and responsibility VII: communicate and advocate for health and health education.

The HEJA study has updated and slightly modified several responsibilities, but the results have yet to be published. Some responsibilities, as well as numerous competencies and sub-competencies, apply only to advanced (graduate level) health educators (Gilmore, 2005; Sakagami, 20004). However, further study is needed to develop and understand the advanced-level competencies.

2. Work Field of the Health Educator

According to the Bureau of Labor Statistics National Employment Matrix, the employment of health educators will

increase from 62,000 in 2006 to 78,000 in 2016. This is an increase of 26% and 16,000 jobs (Lux, 2009). As the costs of healthcare increase, employers are projected to hire more health educators to decrease healthcare costs through prevention and early detection of chronic illnesses (Lux, 2009).

There are several employment settings for health educators in the United States (Table 2). Community health non-profit agencies, academia, healthcare (hospital/clinic), schools, government/government contracting, and businesses are some of the most widespread employment settings.

Community health non-profit agencies, for example the March of Dimes or the American Cancer Society, prefer health educators with a baccalaureate or Master's degree. Agencies require health educators who are qualified at grant writing, research, teaching, and training (Lux, 2009; Stewart, 2006). Agencies need real world experience and the ability to develop and evaluate programs. The annual median salary is \$35,000 (Lux, 2009).

There are numerous employment opportunities in academia. The introductory level begins with the teaching assistant. Tenure-track professors have numerous teaching, research, and other service responsibilities (Lux, 2009; Stewart, 2006). It usually takes between 5 and 7 years for a professor to acquire tenure. After receiving tenure, a professor is eligible to become department chair or eventually take a role in administration (Lux, 2009). The annual median salary is \$49,050 (Occupational

<Table 2> Health educators employment opportunities

Employment Setting	Major Duties/ Job Titles
Non-profit Agencies	Grant writing, research, teaching, training, developing, and evaluating programs Annual median salary: \$35,000
Academia	Teaching assistant, tenure-track professor, administrator Annual median salary (2008): \$49,050
Healthcare (hospital/clinic)	Educate patients, develop educational materials, and supervise educational programs, develop patient support networks Annual median salary (2008): \$56,390
Schools (K-12)	Document and research students' health; design and teach appropriate educational programs
Government	Various, often requiring a specific skill set Local government annual median salary (2008): \$43,040
Business	Develop health promotion programs, technological savvy

Source: Lux, 2009; Occupational Outlook Handbook, 2010; Stewart, 2006

Outlook Handbook, 2010).

Hospitals and clinics reduce healthcare costs through health education. Health educators in these settings must be capable of understanding and communicating research findings, developing patient education materials at a low literacy level, coordinating education programs, and developing patient support and self-care networks (Lux, 2009; Stewart, 2006).

Health educators in schools must balance a complicated skill set. The primary duty of health educators is to develop an effective program curriculum, which can be challenging due to the controversial nature of some health programs. The health educators may need to document and research the health attitudes and behaviors of students and present the needs of the students to parents or school officials in a compelling fashion (Stewart, 2006). According to Rash (2001), the health educator must be a role model of appropriate health behaviors and teach by example. Health educators must have substantial leadership and teaching skills. The most effective programs involve activities in different domains of the students' life, requiring an organized, coordinated effort to be effective (Lux, 2009).

The government hires health educators across a broad spectrum of agencies, from the Centers for Disease Control and Prevention to the Indian Health Service. The skill set required is equally broad, but intensely focused, from bilingual language skills to infectious and chronic disease experts (Lux, 2009).

Health educators in the business setting often work on wellness programs to improve employee health. These programs save companies from \$3-\$15 for every \$1 invested on health promotion. Health educators in this field must have business savvy, using technology effectively and understanding business and financial planning (Lux, 2009). Health educators must also be able to develop a successful health promotion program (Lux, 2009; Stewart, 2006).

The annual mean salary for health educators varies widely by state and region. Maryland had the highest mean salary of \$78,140, while the mean annual salary for the 4 highest-paying states was > the 75th percentile for all health educators. The overall median annual salary for all health educators is \$44,000 (Lux, 2009).

The CUP study in 2005 contributed to the demographic

statistics of health educators. Those with doctorate degrees tend to work at universities (70.2%), and > 60% of health educators have a Master's degree. Approximately 69% of health educators spend > 50% of their time on health educator duties (Gilmore, 2005).

3. Sociodemographic Characteristics of CHES

In 2006, the Bureau of Labor Statistics reported that there were 62,000 health educators employed (Lux, 2009). Although this records the number employed with the title of health educator, it does not record the qualifications or duties, thus making the meaning of this number unclear. Without a universal system for defining and categorizing health educators, the actual number of practicing health educators is unknown. This makes the general demographics of health educators and the number of those eligible for CHES credentialing difficult to estimate.

In 2009, a survey to learn the basic demographics and compensation of CHES-credentialed health educators was done. At that time, there were approximately 8,000 active CHES health educators. Those with accurate addresses (6,879 individuals) were sent four separate mailings over a 4-month period, encouraging them to complete a survey by website. A small number filled out paper copies by participant request. Approximately 20% of the mailed individuals completed the survey (Bonaguro, 2009). The majority of the respondents (89.2%) were female. The majority were also non-Hispanic whites (75.2%). Only 6.5% were nurses (Bonaguro, 2009). Table 3 contains the demographic summary.

CHES-credentialed health educators worked in a variety of settings, with academia and governmental jobs being most highly represented. Of the CHES health educators, 23.9% were employed by colleges or universities and 27.9% were employed through the government, with only 5% being federal (Bonaguro, 2009). Many, but not all states require CHES credentialing for health educators (Lux, 2009). Hospitals/clinics and agencies also employ a large number of CHES health educators (12.3% and 14.2% respectively). Public schools and business/industry each employ < 5%, with the remaining 11% of health educators' work settings unclassified (Bonaguro, 2009).

<Table 3> CHES Demographics

Socio-demographics	percent		percent
Gender		Race	
Male	10.8	Non-Hispanic White	24.8
Female	89.2	Person of Color	75.2
Employment Setting		Education	
Academia	23.9	Baccalaureate degree	25.5
Government	27.9	Master's degree	60.9
Hospitals/clinics	12.3	Doctoral degree	10.1
Agencies	14.2	Mean Annual Salary	
Public Schools	4.2	Male FT employee	\$56,489
Business	6.1	Male FT Supervisor	\$66,102
Public Schools	4.2	Female FT employee	\$46,623
Business	6.1	Female FT Supervisor	\$55,007

Source: Bonaguro, 2009

This study showed that CHES-credentialed health educators are highly educated, largely having Master's degrees. Both supervisors and employees were likely to have Master's degrees (total, 60.9%), but full-time supervisors were most likely to have Master's degrees (63.7%). A baccalaureate degree was the highest degree held by 25.5% of the CHES health educators and was more common among part-time workers (30.8% for employees; 38.5% for supervisors). A minority of CHES health educators (10.1%) hold a doctoral degree (Bonaguro, 2009).

The salary of CHES health educators varies by gender along all employment statuses. The mean salary for a full-time employees was \$56,489 for men and \$46,623 for women. For full-time supervisors, the mean salary for men was \$66,102, while it was only \$55,007 for women. However there was a great deal of variance in salary. The minimum salary for a full-time female supervisor was \$12,000, while the maximum was \$250,000. The standard deviation for employees and supervisors varied between \$14,790 and \$22,084 (Bonaguro, 2009).

For CHES health educators as a whole, full-time employees had a mean salary of \$47,497 and full-time supervisors had a mean salary of \$56,663. Part-time employees averaged \$26,537, while the mean salary of part-time supervisors was \$35,360 (Bonaguro, 2009).

The benefit for increasing the level of education was evident from this survey. On average, those CHES health educators with a Master's degree had an increased annual income of \$7,700 over a baccalaureate degree. The mean annual salary for those with a doctoral degree was \$64,874, compared to \$50,204 for those with a Master's degree. This trend was evident in the first year average salary, in which those with a doctoral degree earned, on average, > \$22,000 more than those with a Master's degree (Bonaguro, 2009).

The mean annual salary also varied by employment setting. Those employed full-time by the Federal government had the highest mean annual salary (\$62,102). Those employed full-time by an agency/organization or a hospital/clinic received the lowest mean salary (\$47,773 and \$48,950, respectively; Bonaguro, 2009).

The majority of CHES health educators received basic employment benefits.

Greater than 91% of full-time workers received health insurance, and > 80% received dental insurance and workman's compensation. Approximately 80% of CHES health educators had life insurance. Those CHES health educators who were part-time workers had less access to benefits, with < 40% receiving life insurance and many other benefits (Bonaguro, 2009).

A smaller survey in 2005 generally supported many of these findings (Thackeray, 2005). It was also found that approximately 90% of CHES health educators were full-time employees, with approximately 70% stating that > 50% of their job was related to health education. CHES health educators were not members of any one professional association, with no major organization having members from > 31% of the health educators. Only 52.2% of the health educators were members of > 1 of the 3 major organizations (APHA, SOPHE, and AAHE; Thackeray, 2005).

IV. Conclusion

The health educators profession in the United States has developed rapidly in the last half century. The creation of NCHEC and CHES credentialing has led to profession-wide standards through competencies for entry-level and advanced health educators. With the addition of MCHES during the next year, employees will be able to clearly identify the qualifications of health educators.

As the field of health education continues to develop and change, new areas of necessary study will arise. Three areas starting to be researched are multiculturalism, advocacy, and ethics. Both advocacy and cultural competence were found to be core competencies for the current health educator workforce, and both were also continuing education needs of the workforce (Allegrante, 2001). In the United States with its growing ethnically-diverse population, research on cultural competence has become of pressing importance.

In a study by Luquis (2005), 62% of health educators were reported to be culturally-aware, and 34% showed cultural competence. Participants who were identified as white, non-Hispanic, or who did not work with an ethnically-diverse clientele tended to have lower scores. Research continues on how to maximize the efficacy of health promotion in ethnically- and racially-diverse populations with different health needs (Kozel, 2003).

Advocacy has evolved to become an integral part of the

public health field (Tappe, 2001), but there is still a gap between what health educators should do and what health educators actually do (Chaney, 2006). There is not a widely used conceptual framework for public health advocacy (Christoffel, 2000). Conceptual frameworks, like health advocacy competencies, are still being developed (Tappe, 2001).

The SOPHE code of ethics was the earliest ethics code for health educators. The SOPHE code of ethics was developed in 1976, and followed by the AAHE Code of Ethics in 1993. Later, these two codes, with input from representatives of other national health educator organizations, were combined into a unified, health educator field-wide Code of Ethics in 1999 (Capwell, 2000). Since that time, interest in ethics has continued with ethics being incorporated into CHES competencies and other dimensions of the health educator field.

With > 12,000 health educators receiving CHES credentialing, the United States CHES system is widespread and influential. CHES-credentialed health educators work in a wide range of employment settings, with the government and universities and colleges employing approximately one-half of all CHES educators. CHES-credentialed health educators are highly educated with an average salary between \$47,000 and \$56,000. As NCHEC continues to improve and validate the competencies, the CHES system becomes a more valuable tool for the future.

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〈국문초록〉

미국의 CHES 프로그램: 현대 보건교육사의 역할과 제도의 발전

목적: 보건교육 분야는 상대적으로 새로운 영역이나 전 세계적으로 건강증진의 중요성에 대한 요구가 강조되면서 빠르게 발전되고 있다. 많은 나라에서 보건교육사 프로그램을 제도화하는 노력을 하고 있다. 본 연구는 미국의 보건교육사 제도를 고찰함으로써 국제적 보건교육사 제도의 개발 및 발전에 기여하는 데 있다.

방법: 본 연구는 문헌고찰을 통하여 미국의 자격증 제도, 보건교육사의 역사 및 다양한 현장에서 보건교육사의 역할과 특성을 파악하였다.

결과: 보건교육사의 역할과 기술은 현장에 따라 다르게 요구되거나 크게 일곱 가지의 대영역으로 분류되며, 35개의 기술 분야에서 163개의 하위기술이 필요한 것으로 나타났다. 미국은 의료비의 증가로 인하여 만성질환의 조기발견과 예방사업을 위하여 미국의 보건교육사는 2006년에 2006명에서 2016년에는 78,000명으로 증가될 것으로 전망된다. 보건교육사는 다양한 분야에서 고용되고 있으며, 주로 지역사회 건강단체, 연구소, 보건센터(병원, 의원, 보건소), 학교, 정부공무원 및 사업체 등에서 활동하고 있다.

결론: 미국의 보건교육사 제도의 발전은 보건교육사 프로그램을 개발하고 발전시키고자 하는 여러 나라에 좋은 모델이 될 수 있다. 또한 미국 보건교육사의 다양성과 전문성은 한국의 보건교육사 제도의 발전에 도움이 될 것으로 여겨진다.

주제어: CHES, 보건교육, 보건교육사 제도