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Coverage of Entry-Level CHES Responsibilities and Competencies Developed in the United States by Health Education-related Professional Preparation Programs in Japan

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Ⅰ. Introduction and Background

Health education is an important profession and a learning process for fostering health and healthy behaviors. In the United States, health educator has been defined as a practitioner who is professionally prepared in the field of health education, who demonstrates competence in both theory and practice, and who accepts responsibility to advance the aims of the health education profession (Joint Committee on Health Education Terminology, 1990). To establish this profession, the United States has been developing certified health education specialists (CHES) over past 50 years since the first health educator was employed in 1946 (Cleary, 1995; American Association for Health Education, National Commission for Health Education Credentialing, & Society for Public Health Education, 1999; Taub, 1998). Tremendous efforts have been made on the CHES development process such as the formation of coalitions and task forces among health related professional

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organizations, the development of accreditation programs, the CHES credentialing body and the responsibilities and competencies of CHES (Sakagami, 2004). The National Commission for Health Education Credentialing (NCHEC)(2003) was defined CHES as a health educator certified by credentialing who have specific professional responsibilities and competencies in providing health education programs and health education and health promotion services to individuals, groups and communities. Table 1 shows the 7 entry-level CHES responsibilities and related competencies developed in the U.S. focusing on needs assessment, planning, implementing and evaluating health education programs, coordinating health education services, being a resource person, and communications. As the eligibility for the CHES exam, the applicants must possess a bachelor's, masters' or doctoral degree in health education, community health education, public health education, school health education and the like, from an accredited institution or higher education (National Commission for Health Education Credentialing, 1996; National Commission for Health Education Credentialing & Coalition of National Health Education Organizations, 1996; National Commission for Health Education Credentialing, 2000, 2003; Sakagami, 2004).

NCHEC (2003) states that credentialing is very important for any profession, including health education specialists, because it provides certified evidence by a professional organization and evidence of the authority or qualification of professionals in written form: this includes certification, registration, development of professional standards and maintaining quality of practices.

In terms of the development process of Japanese health educators, Japan has initially followed the CHES system in U.S. and has recently developed a credentialing system for Japanese health educators: the need for Japanese health educators was first discussed in 1994, and more detailed discussions of the development process of health educators began in 1998 by the Japanese Society for Health Education (JSHE). The JSHE discussed many issues such as regulation, courses needed for Japanese health educators, certification process, continuing education, and differences between practical health educators and health education specialists in Japan until the year 2002. In the end of 2002, the credentialing of Japanese health educators was approved by the Japanese government as a Non-Profit Organization (NPO). This was a big step forward in the development process of Japanese health educators (Committee for

the Development of Health Educators, JSHE, 2000, 2001; JSHE, 2003ab).

Table 1. 7 Entry-Level CHES Responsibilities and its Competencies

Responsibility Ⅰ: Assessing individuals and community needs for health education
Competency 1: Obtain health-related data about social and cultural environments, growth and development factors, needs and interests.
Competency 2:Distinguish between behaviors that foster and those that hinder well-being.
Competency 3: Infer needs for health education on the basis of obtained data.

Responsibility Ⅱ: Planning effective health education programs
Competency 4: Recruit community organizations, resource people and potential participants for support and assistance in program planning.
Competency 5: Develop a logical scope and sequence plan for a health education program.
Competency 6: Formulate appropriate and measurable program objectives.
Competency 7: Design educational programs consistent with specified program objectives.

Responsibility Ⅲ: Implementing health education programs
Competency 8: Exhibit competence in carrying out planned educational programs.
Competency 9: Infer enabling objectives as needed to implement instructional programs in specified settings.
Competency 10: Select methods and media best suited to implement program plans for specific learners.
Competency 11: Monitor educational programs, adjusting objectives and activities as necessary.

Responsibility Ⅳ: Evaluating effectiveness of health education programs
Competency 12: Develop plans to assess achievement of program objectives.
Competency 13: Carry out evaluation plans.
Competency 14: Interpret results of program evaluation.
Competency 15: Infer implications from findings for future program planning.

Responsibility Ⅴ: Coordinating provision of health education services
Competency 16: Develop a plan for coordinating health education services.
Competency 17: Facilitate cooperation between and among levels of program personnel.
Competency 18: Formulate practical modes of collaboration among health agencies and organizations.
Competency 19: Organize in-service training programs for teachers, volunteers, and other interested personnel.

Responsibility Ⅵ: Acting as a resource person in health education
Competency 20: Utilize computerized health information retrieval system effectively.

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Competency 21: Establish effective consultative relationships with those requesting assistance in solving health-related problems.
Competency 22: Interpret and respond to requests for health information.
Competency 23: Select effective educational resource materials for dissemination.

Responsibility Ⅶ: Communicating health and health education needs, concerns and resources
Competency 24: Interpret concepts, purposes and theories of health education.
Competency 25: Predict the impact of societal value systems on health education programs.
Competency 26: Select a variety of communication methods and techniques in providing health information.
Competency 27: Foster communication between health care providers and consumers.

According to the recent JSHE News Letter (JSHE, 2005), the NPO has started to certify those practicing health education who took more than 12 credits of a 16 credit lecture course program focusing on basic knowledge and concept of health education, including introduction to health education (4 credits), and passed an essay exam developed by the NPO as practical Japanese health educators: the NPO distinguished between practical health educators and health education specialists, who have more advanced skills on health education and promotion. In 2004, about 24 candidates were certified as practical health educators. By the year 2006, the total number of certified practical health educators in Japan became more than 65. The details of the lecture course program for practical Japanese health educators are shown in Table 2. However, the NPO has not yet decided specific responsibilities and competencies for the practical health educators as well as health education specialists in Japan. In addition, no prior research studies had been conducted to assess the roles and competencies of both practical health educators and health education specialists in Japan. Therefore this topic was focused on this study. The purpose of this study was to assess the current coverage of the responsibilities and competencies for certified health education specialists developed in the U.S. by health education-related professional preparation programs in Japan. A second purpose was to examine concerns and opinions related to the development of health education specialists in Japan.

Ⅱ. Methods

Survey Development

The survey questionnaires was developed in using the 7 entry-level CHES

responsibility and the 27 entry-level CHES competency, developed by NCHEC (1996). The survey items were initially selected, formatted, and ordered according to advice from the advisors at Teachers College, Columbia University. The survey questionnaires included four sections:

Section 1: About the respondents' school program, including type of school and program, number of full-time and part-time students and faculty members in the respondent's program (7 questions)

Section 2: About emphasis of entry-level CHES responsibilities and coverage of entry-level CHES competencies, ranking of CHES competencies, and other competencies recommended for future Japanese health education specialists (5 questions)

Section 3: About demographic information of the study respondents (11 questions)

Section 4: About barriers, concerns and opinions related to the topic.

Table 2. A Sixteen-Credit Course Program for Practical Japanese Health Educators

1. The requirements to be applicants for practical health educators:
   1) Applicants must be members of the JSHE,
   2) Applicants must have at least a bachelor's degree
   3) Applicants must have health education-related working experience in the community, or school or worksite settings such as hospitals
   4) Other - individuals whom the NPO recommended as applicants to be practical health educators.

2. Sixteen-credit course titles and credits decided by the NPO
   Core courses (6 credits): Introduction to Health Education (4 credits)
   Health Education Goals and Concept (2 credits)
   Elective courses (2 credits x 5 courses = 10 credits):
   Course 1 (Practice of Health Education): A. Implementation
   B. Evaluation
   Course 2: A. Health Epidemiology
   B. Statistics on Health Education
   Course 3: A. Health related Laws
   B. Health Promotion
   Course 4: A. Social Marketing
   B. Health Communication
   (*Applicants need to chose either course A or course B in each category)
   Course 5: Health Sociology (2 credits)

Prior to implementing the study, the survey questionnaire was translated into the target language, Japanese. To ensure clarity of several meanings as well as linguistic and cultural appropriateness, each translated item in the survey questionnaire was reviewed and edited by Japanese professors, including the chair of the meetings for the development of health education specialists in Japan. "Think-aloud sessions" was also conducted by using these questions to ascertain whether the response options were appropriate and understandable for the Japanese respondents. The translated survey questionnaires were revised after these item analyses were conducted. Some suggestions by Japanese professors were helpful to avoid confusing the respondents: for example, the term "teachers" would be more appropriate than the term "professors" or "faculty", because in Japanese, the word "teachers" implies both "professors" and "faculty" and is generally more convenient and understandable, regardless of title. Back translations were also provided by a professional translator to validate Japanese translations of all survey documents: the survey questionnaire, pre-cover letter, cover letter, consent letter, and reference list of all entry-level CHES responsibilities and competencies.

Study Design and Data Analysis

This cross-sectional survey study that utilized purposeful sampling was conducted from August to December, 2002. The Directory of Ministry of Education, Culture, Sports, Science, and Technology (2001) indicating that there were 671 4-year universities and colleges in Japan, was used to select eligible programs teaching health education for this study. Of these, 140 programs offering health education-related professional programs including 11 public health programs (belonging to School of Medicine), 79 nursing programs, 14 school nurse programs, 27 health and sports programs, and 9 health sciences-related programs including environmental health and health planning, were chosen as potentially eligible for this study. Because these programs teach health education courses and offer training programs for primary health care providers such as nurses, school nurses, sports instructors, physical educators, and public health nurses, who were defined by the JSHE as the initial candidates to be Japanese health educators, these programs have also been considered by the NPO as the most appropriate sites for training future Japanese health education specialists. Other professional college programs, either not deemed by the researcher to be substantial for the certification process or not related to health

education, were excluded. The participants selected for this study were male and female Japanese academicians teaching in health education-related programs, having at least a Master's Degree, and speaking Japanese.

Before sending the survey to potentially eligible respondents, the researcher contacted each eligible program to explain the purposes of the study and requirements, verify program eligibility such as offering health education courses, and identify potential participants. If all requirements of the study were met and the most eligible professor was identified, the researcher talked to the eligible professor to introduce herself and explain about the study: the purpose of the study, why the program had been chosen, and described the development process of Japanese health educators, which some of them knew nothing about, as well as explained why each professors' participation was sought. A pre-cover letter including the purpose of the study and why this study is important, was also emailed or faxed to the eligible professors. After that, the survey questionnaire was sent to each eligible professor who agreed to participate in the study via regular mail or email.

If the eligible professors declined to participate in the study, other eligible professors who were also able to complete the survey questionnaires were sought. Several professors actually recommended their colleagues or other professors, because they could not have time to fill out the survey or other professors were more eligible for the study. The recruitment procedures and each participant's initial responses to participating or not participating were recorded on an evaluation form. Follow-up emails were also sent to the eligible professors who had not responded to the survey. The study deadline indicated in the follow-up emails was strictly maintained.

Frequency distributions were used to analyze the quantitative data such as school type, school programs, demographic factors, and the respondents' familiarity with CHES. Qualitative data such as reasons for not covering a competency and new competencies recommended by the respondents, were systematically tabulated in the tables. The emphasis level of each responsibility was coded using a 3-point Likert scale ranging from 0 (not emphasized at all) to 2 (strongly emphasized). The coverage level for each competency was also coded as either minor coverage or major coverage. The respondents also provided the reasons if competencies were not covered by their programs.

Ⅲ. Results

Response rate and background characteristics:

Of the 140 programs determined as eligible for this study, 12 programs were eliminated as potential study candidates, either because they had not implemented the 4-year college curriculum due to newly-established school programs within the past 4 years or because they did not offer health education-related courses in their programs at that time. Consequently, of the 128 eligible programs, professors from 66 different programs (52%) responded. More than 50% of the respondents were professors teaching in nursing programs. About 20% of the respondents were professors in sports-related programs, and 10% of the respondents were from school nurse programs. Other 20% of the respondents were from public health programs, health sciences or other programs. No significant gender differences were found between the percentages of study respondents (male = 54.5%, female = 45.5%). Sixty percent (n = 75) of the respondents came from the northern part of Japan. Background characteristics of the study respondents were shown in Table 3.

Familiarity of the topic:

The Table 4 shows the study respondents' familiarity with CHES issues, only one-third (n = 22) of the total study respondents were familiar with the development process and issues related to Japanese health educators and CHES issues. These respondents stated that they knew about CHES issues at the meetings held to discuss the development of Japanese health educators or by reading health education-related journals. One-third (n = 22) were members of JSHE, however, several of these respondents knew nothing about either the development processes related to Japanese health educators or about CHES issues.

Needs of credentialing and continuing education:

Ninety five percent of the respondents (n = 63) answered the needs of credentialing and continuing education of Japanese health educators. Of those, 66.7% (n = 44) supported the credentialing concept, and 65.2% (n = 43) said that a continuing education system was necessary for Japanese health educators. Only three respondents stated "do not know" for both needs.

Table 3. Background Characteristics of Study Respondents (n = 66)

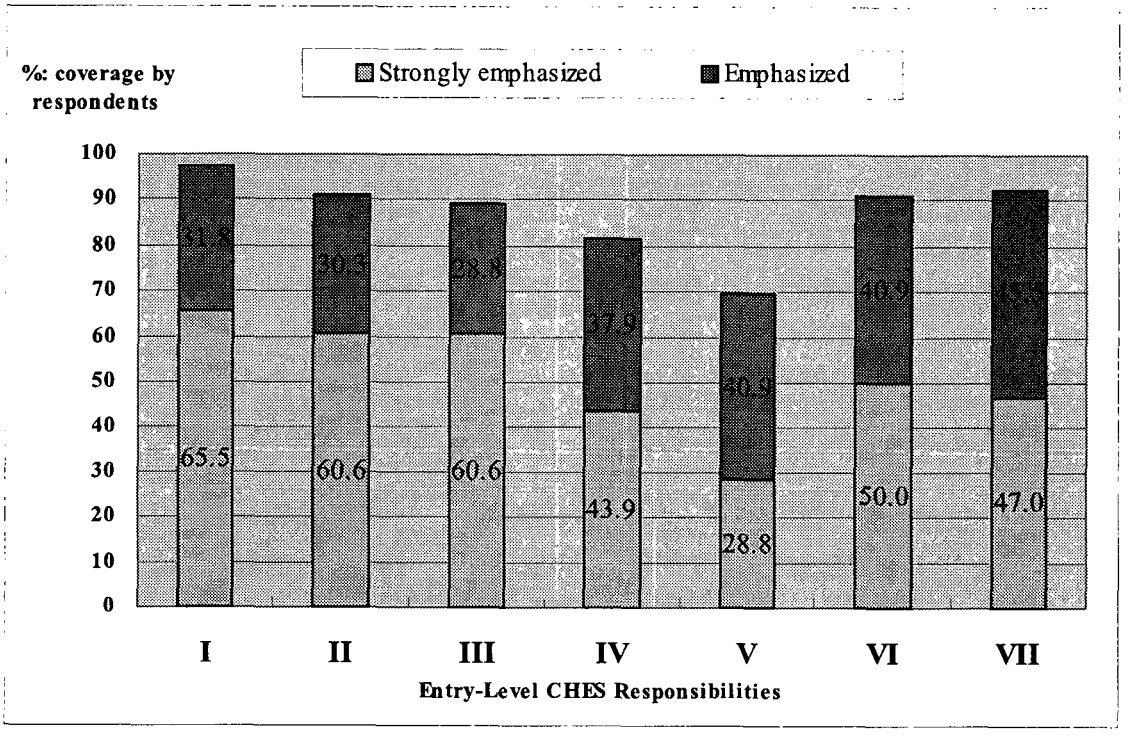
Demographic Factors		n	Percent (%)
Sex	**Male**	36	54.6
	Female	30	45.5
Age:	Mean = 53.8 years		
	Range = 45-54 years	26	39.4
Title:	Professor	40	60.6
	Assistant Professor	15	22.7
	Instructor	11	16.7
Length of Teaching:			
	Mean = 16.3 years		
	Range = 15-19 years	12	18.2
Number of Courses Respondents Have Taught:			
	Mean = 5.5 courses		
	Median = 5 courses	**19**	**28.8**
Educational Degrees:			
	Doctoral degree	**31**	**47.0**
	Professional degree (MD/LLM)	**9**	**13.6**
	Masters degree	**30**	**45.5**
	Baccalaureate degree	**2**	**3.0**
Top 5 memberships in Professional Organizations:			
The Japanese Public Health Association (JPHA)		**46**	**69.7**
The Japanese Association of School Health (JASH)		**25**	**37.9**
The Japanese Society for Health Education (JSHE)		**22**	**33.3**
The Japanese Academy of Nursing Science		**21**	**31.8**
The Japan Academy of Community Health Nursing		**20**	**30.3**

Table 4. Study Respondents' Familiarity with CHES Issues (n = 66)

Familiarity with CHES Issues	YES	22	33.3
Reasons for familiarity: Learned about CHES issues			
1) At health education-related meetings in Japan		15	
2) At health education-related meetings abroad		3	
3) By reading Japanese health education-related journals		8	
4) By reading health education-related journals in the U.S.		3	
5) Other: heard about CHES issues from a committee member of the NPC		1	
Familiarity with CHES issues	NO	44	66.7

Coverage of entry-level CHES responsibilities and competencies:

In general, the majority of eligible programs examined in this study emphasized most of the entry-level CHES responsibilities to either a major or minor degree (Figure 1). The top 3 CHES responsibilities strongly emphasized by study respondents were Responsibilities I (65.2%), II (60.6%), and III (60.6%). Responsibility V was the least emphasized responsibility.



Key:

I. Assessing individuals and community needs for health education (Competencies 1-3)
II. Planning effective health education programs (Competencies 4-7)
III. Implementing health education programs (Competencies 8-11)
IV. Evaluating effectiveness of health education programs (Competencies 12-15)
V. Coordinating the provision of health education services (Competencies 16-19)
VI. Acting as a resource person in health education (Competencies 20-23)
VII. Communicating health and health education needs, concerns, and resources (Competencies 24-27)

Figure 1. Emphasis of Entry-Level CHES Responsibilities by Study Respondents Teaching in Eligible Programs (n = 66)

Figure 2 shows the ranking order of coverage of 27 entry-level CHES competencies by frequency distribution for the extent of the coverage. Overall, all CHES competencies were covered, but the extent of these coverage levels varied. The top 5 competencies covered by the respondents were Competencies 1-3 (belonging to Responsibility I, related to need assessment), 20 (utilizing computerized health information) and 24 (interpreting concepts and theories of health education). On the other hand, Competency 19 (organizing in-service training programs) was the least covered among the 27 entry-level CHES competencies: about 50% of the respondents mentioned that Competency 19 was not relevant to their programs. Other low-ranking competencies were Competencies 16-18, which all of which obtained identical scores. All these competencies belong to Responsibility V. The most frequent reasons given for not covering these 4 low-ranking competencies were: 1) The competencies seems to be necessary, but their standards are too high for 4-year college programs, 2) The programs lack time and faculty members to teach these competencies, and 3) These competencies were not the focus of the programs. In addition, the top 3 courses most frequently reported by all respondents

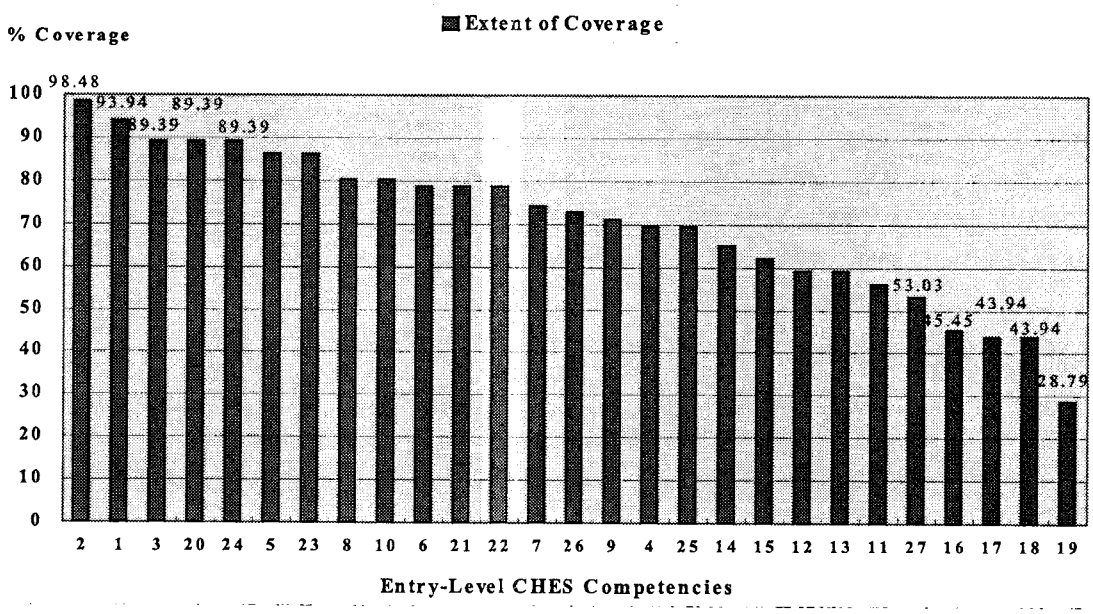


Figure 2. Coverage of Entry-Level CHES Competencies by Study Respondents Teaching in Eligible Programs (n = 66)

to cover entry-level CHES competencies, were introduction to health education, introduction to public health, and practical courses and fieldwork in their program majors. In response to the question on which courses should be implemented to include competencies not presently covered by eligible programs, the course titles listed most frequently were similar to those listed above.

Reasons for not covering entry-level CHES competencies:

The top 3 reasons most frequently mentioned by the respondents were: 1) The training levels and standards of some entry-level CHES competencies are too high at the 4-year college level, because the programs focus on the basic skills and courses, 2) Some skills required for entry-level CHES competencies cannot be implemented effectively in current programs due to neither time or room to cover the competencies, nor faculty members to teach them, and 3) Several CHES competencies need to be covered in graduate programs.

Competencies recommended by the study respondents:

Seven respondents recommended 15 additional competencies to future preparation programs for Japanese health educators. These competencies were tabulated and categorized into 6 different themes, as shown in Table 5. The 3 most important themes

Table 5. Six Themes of Other Basic Competencies Recommended by Study Respondents (n = 7)

Themes	n	Percent (%)
1) Health educators themselves must become exemplary health professional models (e.g., good self-regulation skills). = Role modeling	5	71.4
2) Teaching and educational strategies should incorporate psychological theories/ such as empathy and sympathy. = Cultural competencies	3	42.9
3) Health education/training programs need to focus more on specific populatio children and teens. = Planning health education programs	3	42.9
4) Health educators have to develop effective skills for planning needs assessments. = Needs assessment	2	28.6
5) Skills for using health measuring instruments effectively are necessary for health educators = Skills of applying health measuring instruments	1	14.3
6) Health educators have to be able to obtain knowledge and enough information about health sciences, and also judge if the knowledge/information is accurate. = Be a resource person	1	14.3

by the respondents were: 1) Role modeling (n = 5), 2) Cultural competencies (n = 3), and 3) Planning health education programs for youth (n = 3).

Barriers, concerns and opinions related to the development of Japanese health education specialists by the study respondents

Table 6 shows that 87% (n = 57) of the study respondents offered their perceptions of barriers, concerns about and suggestions for the development of Japanese health educators. These responses were tabulated according to different themes. Two Japanese professors verified both themes and responses, and the verification results were highly consistent. The table indicates the 3

Table 6. Composite Table of the Responses by the Study Respondents related to the Development of Japanese Health Educators (n = 57)

Theme	Statements
1. Professional Training	
Barriers	· The coverage of all 27 entry-level competencies seems to be unrealistic in the 4-year college programs, because the programs focus on different health professionals and there is no time for new courses such as fieldwork for practi training (n = 30). · Changing/arranging current school programs for training Japanese health education specialists is difficult/problematic because of the lack of qualified teachers, and because policies, norms, and structure of programs are very hard change (n = 18).
Suggested remedy	Possible programs for training Japanese health education specialists could be graduate programs, especially nursing programs, or in collaboration with other programs such as public health programs, epidemiology programs, and education programs (n = 30).
2. Need for well-defined competencies	
Concerns	· The competencies of Japanese health education specialists need to be well-defined in the future, because the roles of Japanese health education specialists are similar to those of public health nurses(n = 32). · It is important to acquire more practical and additional skills such as competent caring skills and problem-solving skills, and also to have positive cultural values (n = 5).
3. Importance of licensing	
Concerns	· There is an important need for the licensing of health education specialists in Japan (n =17). · It is important to consider the social needs of Japanese health education specialists and how the Japanese society views this profession (n = 13).

key themes and major responses for each theme: 1) professional training for Japanese health educators, 2) the need for well-defined competencies, and 3) the importance of licensing. The first theme, related to professional training, included barriers such as the current programs' difficulty in covering all 27 entry-level CHES competencies (n = 30) and arranging current programs to cover the CHES competencies (n = 18) because of current school policies, norms and structures, and lack of qualified teachers. In addition, study respondents suggested that graduate programs may be better to train Japanese health educators, or collaboration among other programs may present a better remedy for coping with these barriers (n = 30).

The second theme was related to the need for well-defined competencies (n = 32). Because Japanese public health nurses are responsible for community health and serve as community health educators, the respondents felt that the roles of Japanese health educators need to be well-defined in the future in order to distinguish between health educators and public health nurses. Some respondents cited the need to develop additional skills such as competent caring skills (n = 5) to distinguish these two professions. The third theme, related to the importance of licensing (n = 17), included concerns about the social needs for and the status of Japanese health educators.

Ⅳ. Discussion

Although all 7 entry-level CHES responsibilities developed in the U.S. were generally emphasized to different degrees by the study respondents, not all responsibilities received the same emphasis. The 3 responsibilities most emphasized by the study respondents were responsibility I (n = 64), responsibility II (n = 60) and responsibility III (n = 59). This result indicates that a high percentage of the health education-related programs participating in this study emphasize skills related to needs assessment, planning, and implementing health education programs. In addition, of the 27 entry-level CHES competencies, the 3 competencies most frequently covered by the study respondents were competency 1 (93.9%), competency 2 (98.5%) and competency 3 (89.4%). These competencies belong to responsibility I, which is the most frequently covered responsibility. The fourth, and fifth competencies most frequently covered by the study respondents were competency 20 (89.4%) and competency 24 (89.4%).

The findings of the entry-level CHES competency coverage imply that needs assessment skills may be strongly

emphasized in Japanese health education-related professional preparation programs. Computer facilities are readily available in Japanese colleges and universities, and Japanese students commonly have opportunities to search health-related literatures using the Internet. The acquisition of computer skills, which are important for enhancing the ability of health educators to act as a resource person, seems to be specifically emphasized. McKenzie, Cleary, McKenzie, and Stephen (2002) also stressed the importance of computer skills to health educators in their study. Finally, competency 24 indicates that understanding theories and concepts of health education are important concerns for Japanese health educators.

On the other hand, competencies 16-19, which belong to responsibility V (coordinating provision of health education services), were the least covered competencies by the study respondents. More than 70% of the study respondents mentioned that competency 19 was not covered by their current programs, while more than 50% reported a lack of coverage for competencies 16, 17, and 18. Responsibility V was also the least covered among all the entry-level CHES responsibilities. Thus, many current health education-related programs do not seem to focus on these skills. Although the respondents provided the reasons for not covering these competencies, specific reasons for not covering these competencies were 1) difficulty in collaborating among health organizations and agencies in Japan (competencies 17 and 18), and 2) few opportunities for to use the skills related to competencies 16 and 19. While there may be fewer opportunities to use these competencies in Japanese society, it may also be more difficult to teach skills related to "services" in their current programs because the school programs focus on "education", not "services".

The competencies most and least frequently covered in this study were similar to those in a study conducted by Hurster and Schima (1994), who focused on students' perceptions of the coverage of entry-level health education competencies. The competencies identified as thoroughly covered by the 276 participating students from 26 different U.S. institutions were related to assessing needs, program planning, identifying health sources and information, spiritual health, defining health education, and professional code and ethics. These competencies included competencies 1-3 and 24, which were also identified as the most frequently covered competencies by the Japanese study respondents. But in Hurster and Schima's study, competency 20, relating to accessing computer-based

information, was not included in the most frequently covered competencies. It is possible that computer facilities were not available or may have been too expensive and not commonly used at that time. Thus, students were not well-prepared in that skill.

On the other hand, in Hurster and Schima's study, competencies 16-19, relating to the evaluation and coordination of health education services and competencies 20-23, relating to acting as a resource person, were identified as poorly covered or not covered at all. Although this study and Hurster and Schima's study were conducted at different times, these similar results suggest that health education-related professional preparation programs in both the U.S. and Japan have focused predominantly on assessing needs and program planning. Health education-related professional preparation programs in both countries may also not focus much on coordinating of health education services. The competencies related to this responsibility need to be covered and strengthened for future professional preparation programs in both countries. However, this study and Hurster and Schima's study suggest that U.S. health education programs may focus more widely on different aspects of other competencies such as spiritual health, defining health education, developing a professional code of ethics, and developing health-related resources more than health education-related programs in Japan do.

As the study respondents mentioned the major reasons for not covering competencies (e.g., the CHES competencies are too advanced for undergraduate-level programs in Japan; the current programs do not target these competencies; few opportunities exist to apply these competencies in Japan; lack of time and eligible professors), the current health education-related programs in Japan may not be able to teach all entry-level CHES competencies. If they like to teach them in future, collaboration with other school programs such as medical programs, epidemiology programs and education programs may be needed or graduate-level programs to train future Japanese health educators need to be developed. Apparently, appropriate and suitable competencies and responsibilities for Japanese health educators need to be identified more specifically. This would be a challenge on the development of Japanese health educators.

In addition, other competencies recommended by the study respondents, such as being exemplary health professional models, cultural competency skills, competent caring skills, should be added and considered for future Japanese health educators. Any new or applied courses and practical activities should be considered for

future Japanese health educators in their training programs. This would be one of the priority tasks for the NPO (JSHE, 2003b).

The development of health educators has, in fact, been done not only in Japan but also in many other countries such as Korea, Taiwan and Israel. The framework of health educators' roles defined by these countries may be helpful sources for Japan (Hiramani & Sharma, 1989; Chen, 1991; Martins & Candeias, 1991; Workers' risk perception in Brazil, 1994).

Other Important Issues

Several important issues related to this study arose in the final analysis. While some professors were easy to contact and very cooperative, many were not. Also, because two-thirds of these professors did not even know about the development of Japanese health educators, it took time to talk to them about this topic. In addition, follow-ups were made to them at least two to three more times. Although non-participants provided different reasons for not joining the study, the most common reason was that they were too busy.

As this study indicated that two-thirds of the study respondents knew little or nothing about the development process of Japanese health educators, it was noticed that this topic has not been announced widely in Japan, and most of college and university professors, other health care professionals, or presidents of health-related professional organizations are unaware of it. Therefore, projects advertising meeting schedules to discuss this topic need to be implemented.

Two-thirds of the respondents were not members of the JSHE. The most common health-related professional organization among the respondents was the Japanese Public Health Association (JPHA) (69.7%). Other key health-related professional organizations represented by the respondents were the Japanese Association of School Health (JASH) (n = 25) and the Japanese Society for Hygiene (n = 15). The Japan Academy of Nursing Science (n = 21) and the Japan Academy of Community Health Nursing (n = 20) were the main professional organizations for respondents in nursing programs. The JSHE should collaborate with these health-related organizations to increase awareness and promote the development of Japanese health educators.

Finally, since the eligible professors in the north of Japan (60% of respondents), which is closer to Tokyo, were more likely to respond to the survey than those in the south of Japan (39.6% respondents), it seemed that eligible professors closer to Tokyo may have known more about this topic or may have been more interested in it than those in the south of Japan. To increase awareness of this topic, another

strategy targeting professors in the south of Japan may be needed.

V. Recommendations

Future studies using a large sample and alternative study methods such as qualitative methods (e.g., focus group discussions) should be conducted to obtain more specific opinions on this topic and assess the needs of this profession. In addition, this topic should be promoted more adequately among different academic institutions and health-related professional organizations such as JASH and nursing related professional organizations, as well as government agencies. Discussions focusing on the needs, social status, value, and image of Japanese health educators, and effective strategies to develop a training program for Japanese health educators are necessary. Finally, appropriate responsibilities and competencies should be well-defined, including those recommended by the respondents, to develop a framework of responsibilities and competencies for future Japanese health educators. Many U.S. studies support this recommendation and also cited the importance of including evidence-based responsibilities and competencies in a framework (Brandon, 1991; Redican et al., 1994; Akhter, 2001; Chauvinet et al., 2001; Dato et al., 2001; Lichtvelt et al., 2001; Turnock, 2001; Dato et al., 2002).

VI. Limitations

This study used a sampling strategy that may have limited the response rate in some ways. Second, the quality and accuracy of responses may have been limited by the degree of respondents' interest and understanding of the topic. To measure the coverage of entry-level CHES competencies, the survey was limited to eligible professors in health education-related professional preparation programs in Japan who teach health education-related courses and who agreed to participate in the study, which these programs had been considered as potential priority programs for training Japanese health educators in the past meetings. Finally, the survey was a self-administered questionnaire and only focused on entry-level CHES responsibilities and competencies, but not the sub-competencies. Thus all responses collected for this study were based on the perceptions, thoughts, and opinions of the respondents, not those of each professional program.

Ⅵ. Conclusion

This research study is the first to focused on assessing coverage of responsibilities and competencies, concerning of professional preparation programs and credentialing process for Japanese health educators. Although a system for credentialing of Japanese health educators was established in 2002, no other research studies have been implemented on this topic. Therefore, this study may be fundamental for the future development process of Japanese health educators. The ultimate conclusion is that this topic requires further research and discussion including the fundamental issues such as the social needs, status and background of a Japanese health educator. There are many challenges on the development process of a health educator in Japan. The quantitative data collected and qualitative responses offered by the study respondents are potentially meaningful for future research studies and discussions related to this topic. This study indicated that not all CHES competencies developed in the U.S. were covered to the same degree by parallel health education-related programs currently offered in Japan, and some of the CHES competencies developed in the U.S. may not be adequate for future Japanese health educators.

The findings revealed that the health education practice and environment in Japan may differ from that in the U.S., requiring a modification and tailoring of the responsibilities and competencies expected for future Japanese health educators. The findings also suggested that a future definition of responsibilities and competencies for Japanese health educators should be used as a framework for this profession. One study in the U.S. (Luebke & Bohnenblust, 1994) supports this suggestion made by the study respondents.

This study contributed to promote this topic to professors eligible to train future Japanese health educators. A follow-up study examining their ongoing thoughts and opinions on this topic may be needed. Obtaining support and cooperation from those professors, government agencies, different health care providers, especially medical doctors, dentists and public health nurses who are responsible for community health education, and other health-related professional organizations are essential to continue developing Japanese health educators. Japan has taken great strides in developing the profession of health education, as exemplified by recent national health projects such as "Healthy Japan 21" and "Healthy Family 21", and health policies implemented by the Ministry of Health, Labour, and Welfare (2001). With these

national health projects, health education supporting an aging society and related behavioral modification programs that are needed to prevent individuals from acquiring chronic diseases, has been augmented. Therefore, not only are Japanese health educators expected to become leaders who promote well-being and quality of life for the entire Japanese population in multi-settings, but they will also need to assist the development of health policy and work at local and national levels in all sectors of Japan.

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ABSTRACT

This study assessed 1) the coverage of the entry-level responsibilities and competencies for certified health education specialists (CHES) developed in the United States (U.S.) by 140 current health education-related professional preparation programs in Japan, and 2) barriers and concerns related to the development of Japanese health educators. A cross-sectional survey study was conducted to Japanese professors teaching health education-related courses at 4-year universities/colleges in Japan.

All entry-level CHES responsibilities and competencies were generally covered to different degrees by the study respondents. The top 3 responsibilities most emphasized by the respondents were Responsibilities I, related to need assessment skills, Responsibility II, related to planning health education programs, and Responsibility III, related to implement health education programs. The 3 competencies most frequently covered by the respondents were related to needs assessment skills (Competencies 1-3). The competencies least covered by the respondents were those related to Responsibilities V (Competencies 1619). Other competencies related to role modeling, cultural competencies, and planning youth health education programs, were recommended. In addition, the major concerns and opinions that the respondents reported for this topic pertained to 1) Professional training, 2) The need for well-defined professional roles, and 3) The importance of licensing.

The results suggested that Japanese health education-related programs cover all CHES responsibilities and competencies developed in the U.S. to different degrees. However, they tend to focus more on needs assessment, planning and implementing health education programs. Although possible responsibilities for future Japanese health educators were recommended, further research to identify the most appropriate responsibilities and competencies for this profession is needed. Major barriers, concerns and opinions reported by the respondents should be discussed at future meetings for this profession.

Key Words: Health Education, Health Educators, Certified Health Education Specialists(CHES), CHES Credentialing, CHES Responsibilities, CHES Competencies