

Assessing the Perceived Importance of Preparing Health Educators to Teach Adult Learners

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Abstract

Adult learners are the primary target population in health education programs in the community, worksite and medical settings. The purpose of this study was to document the need for the incorporation of adult education principles in health education professional preparation programs and to delineate current efforts in health education programs to train future health educators in adult education. "Preparing Health Educators to Teach Adult Learners" survey was designed to document the need for adult education in health education and determine its role in current curriculum development. Data were collected from a nationwide random sample of health education professionals; total response rate was 58.4% (n=111). Statistical data analysis determined that health education academicians surveyed recognized an overwhelming need for the infusion of adult education principles into health education preparation programs (84.1 %, n=86). Few programs at the undergraduate or graduate levels required students to take a specific course that addressed adult education (30.8%, n=42). Statistically significant differences between undergraduate and graduate programs existed for the following variables: belief that programs currently teach health educators to prepare adults (p=0.001), infusion of adult education in health education courses (p=0.001) and extent to which adult education is taught in other educational courses (p=0.003). Based upon these findings, a major recommendation from this study would be that professional preparation programs include adult education training for future health educators and that these courses be taught by adult education professionals.

Key Words: *health education, adult education, curriculum development, adult learners*

Introduction

Increasing demands by a variety of external and internal forces shape and define key issues which substantially impact the preparation and practice of health educators. Managed care with its emphasis on prevention, increased demand for worksite/corporate wellness programs and the delineation of standards for preparation of graduate-level health educators shift the discipline's educational focus from a traditional school-based model to adult populations. Adult learners are frequently the primary participants of a variety of health education programs designed and delivered by health education professionals. This study sought to ascertain whether specific principles, theories and teaching strategies for adult learners are included in health education professional preparation curricula. Health educators frequently provide current scientific information and research to adult learners in various health education settings, but often what is needed is an interpretation of that scientific information to make it practical and relevant for adult audiences (Barer-Stein & Connolly, 1994). The purpose of this study was to document the need for adult education principles in

health education professional preparation programs and to delineate current efforts in health education programs to train future health educators in adult education.

Background

The ability to identify forces that shape the demand for health education programs and react proactively to these salient issues is critical for the survival of the discipline. Employment settings for health educators include: university, medical, worksite and community (SOPHE/AAHE, 1997). In each of these settings, unprecedented changes are occurring that dramatically increase the demand for health education programs. Key to the viability and sustainability of this field is to effectively navigate these changes.

Health educators purport to be specialists in the areas of assessment, program planning, implementation and evaluation (National Task Force, 1985). Program effectiveness, at all levels, is dependent upon knowledge and understanding of the target population (McKenzie & Smeltzer, 1997). If current changes and increased demand for health education services are viewed in light of the consumer, a common thread emerges. Currently, in all settings, adult learners are the primary participants in health education programs. The health education discipline can rise to the demand

and changes of the times to ensure quality programs for this population by training its professionals to address the needs of adult learners. The following section of the paper lays the groundwork for the significance of the study by reporting current trends in health education and identifying key adult education principles crucial for teaching adults.

Current Trends in Health Education

Significant trends that impact three settings of health education delivery include: 1) graduate-level standards at university settings; 2) managed care at clinical settings; and 3) wellness programs at worksite settings. The impact of each of these trends, delivery mechanisms, and effect on adult education will be briefly explored in this section.

The Society for Public Health Educators (SOPHE) and the American Association of Health Education (AAHE) recently published *Standards for the Preparation of Graduate-Level Health Educators*, the document that delineates basic responsibilities and competencies for the graduate-level health educator (1997). Inherent in the role delineation process at the graduate-level is the professions' commitment to make curricula changes to meet newly defined criteria. When these changes are explored from the perception of the participant in health education programs, the need for adult education is evident. Health educators would be better equipped to address some of the new graduate-level standards if their training was grounded in theories and principles of adult education. In particular, these graduate-level responsibilities and competencies include (SOHPE/AAHE, 1997):

“Determine factors that influence learning and development (R.I, C.D):

1. Assess individual learning styles.
2. Assess individual literacy (p.11).

Develop a logical scope and sequence for a health education program (R.II, C.B.):

4. Analyze the process for integrating health education as part of a broader health care or education program (p.12)

Implementing health education programs (R.III, C.C):

5. Apply theoretical and conceptual models from health education and related disciplines to improve program delivery (p.14).

Communicating health and health education needs, concerns, and resources (R.VII, C.B.):

4. Predict the future health education needs based upon societal changes (p.17).”

These particular competencies challenge the health education field to integrate knowledge from complementary disciplines to best meet the needs of identified target populations. Historically, the health education profession has relied heavily on the education profession to glean expertise in human and cognitive development, curriculum design and teaching techniques. Most of these educational courses are focused from a K-12 perspective (Gilbert & Sawyer, 1995). Increased knowledge of adult education will assist health educators in meeting the challenges of graduate-level standards in health education.

Dramatic shifts in health care services and consumer options have accompanied the recent adoption of managed care as the primary mode of health care delivery (Shi & Singh, 1998). Managed care approach to health care delivery was a reaction to the escalating cost of health care delivery. In order for the provider to keep secondary and tertiary care services and costs to a minimum, primary care and prevention are emphasized (DeMuro, 1995). Responsibility for his or her own individual health is placed on the patient. In clinical settings, health educators work collaboratively with adult patients to design and implement health programs tailored to their individual needs. The emphasis on prevention highlights the adult learner as an active participant in health education programs. In worksite settings, both employers and employees have become more accountable for their health care needs, with an emphasis placed upon prevention. A national meta-analysis of worksite program cost effectiveness ratios determined average savings for companies implementing prevention programs is \$3.00 to \$7.00 for every \$1.00 invested (Pelletier, 1996). To successfully implement prevention programs at the worksite, knowledge of adults as learners is critical.

Adult Education

Adult education is a field characterized by a wide array of programs, agencies, and personnel working to help adult learners. A key component of adult education is a comprehensive understanding of adult learners, adult learning theories and models for teaching adult learners. Merriam and Caffarella divided adult learning theories into three main categories: “those anchored in adult learners' characteristics, those based on an adult's life situation, and those that focus on changes in consciousness” (1991, p. 249). Key adult

education principles crucial to this study are defined: Andragogy, Self-Directed Learning, Proficiency Theory, Model of Learning Process, Transformation, and Theory of Conscientization.

Of the theories based upon characteristics of adult learners, one of the most accepted concepts is the notion of Andragogy, defined by Knowles (1980, p.43) as "the art and science of helping adults learn". Knowles contended that adult learners lean toward self-direction and empowerment, learn best in collaborative or community groups, have a rich reservoir of experience and knowledge to share, are performance-oriented, and finally, desire immediacy of application. Self-Directed Learning (Houle, 1980; Knowles, 1980; Tough, 1979) is a form of study where adults are thoroughly involved with planning, participating in, and evaluating their own learning. Knox's (1980) Proficiency Theory and Jarvis' (1987) Model of the Learning Process address adults' life situations. Both of these models are based on an adult's perceived level of discrepancy between what she or he knows and some desired level of knowledge. Reflection upon the adults' experiences and the inner meaning derived from these experiences form the adult learning theories based upon change or Transformation (Mezirow, 1981). Changes in these meaning structures can occur incrementally or suddenly; these changes may cause adult learners to critically examine and search for new meaning structures, which may lead them to seek some form of organized education. Friere (1970) also described a theory of learning that is transformative; however, his Theory of Conscientization points toward social change as its goal.

Explicit in all adult learning theories and models are the elements of choice and learners actively participating in the learning process while deriving meaning from their new awareness and knowledge. Educators of adult learners help adults to become autonomous and to take more responsibility and control over their own learning processes. In order to plan and teach programs for adult learners, health educators must have knowledge of theory, skills, and training to work effectively with them. The researchers in this study sought to determine if the health education profession prepares health educators to work with adult learners.

Methodology

The study used a quantitative, descriptive approach. The purpose of this study was to document the need for adult education principles in health education professional preparation programs and to delineate current efforts in health education programs to train

future health educators in adult education. A needs assessment survey, *Preparing Health Educators to Teach Adult Learners* was designed by the researchers to meet the defined purpose. The instrument consisted of 13 Likert-type questions, 2 checklists, one open-ended question, and 6 demographic determinants. Consensual content validity was established by a cohort of 12 health educators academicians considered experts in health education professional preparation. Comments and corrections from this panel of experts were incorporated into the final production of the instrument. Reliability for this study was ascertained by calculating Cronbach Alpha. Cronbach Alpha determines internal consistency of an instrument and should be minimally 0.60 (McDermott & Sarvela, 1999). The Cronbach Alpha for this instrument was 0.7465, which is acceptable for behavioral and social science research.

In May 1996, the *Preparing Health Educators to Teach Adult Learners* survey was electronically sent to health educators randomly selected from the International Electronic Mail Directory for Health Educators (HEDIR) listserv. Survey sampling techniques for this study involved random systematic sampling of HEDIR members. All HEDIR members had equal opportunities to be selected in this random sampling design. Targeting 20 percent of members from this list elicited a potential sample size of 203. Sample size was determined according to Isaac & Michael (1990), which dictates a minimum sample size of 208 for a total population of 1000. The researchers sent the survey first via email to a systematic, random selection of members of the HEDIR listserv. After 10 days, an email reminder was sent to those who had not responded. Total response rate via e-mail was 20.7% (n=42). Non-respondents were then mailed a paper copy of the instrument. Postal service mailing elicited 69 additional responses (34%) for a total of 111 (54.7%). In the postal mailed survey, an additional question was added to solicit information as to why the emailed survey went unanswered. Of those who responded to this question, the most frequent reason given by the participants (n=34, 65.4%) was that they did not or do not recall receiving the survey.

Statistical analysis reported descriptive data in the following three categories: (1) should health educators be taught adult education principles, (2) how and within what courses does the current curriculum utilized address adult education, and (3) in what courses should adult education be taught. A five point scale Likert-type response was provided to the participant (*Strongly Agree, Agree, Neutral, Disagree and Strongly*

Disagree). Responses among academicians that taught at institutions offering various degree levels were reported by means and standard deviations. One-way Analysis of Variance (ANOVA) determined significant differences in undergraduate and graduate programs among a number of dependent variables.

Results

Total number of response was 111 or 54.7 percent. Four of the inventories were returned blank or only partially completed, thus reducing response number of usable forms to 107 or 52.7 percent. Average time for completion of the needs assessment survey was 10 minutes. Participants in the study represented a nationwide selection of academicians teaching in a total of 93 different universities offering varying degree levels in health education.

Table 1 depicts frequencies and percentages for demographic variables represented in this survey. The

majority of the participants were female (n=51, 50.5%) and Caucasian (n=89, 89%). All participants had a minimum of a Bachelors degree, 11 percent possessed a Masters level degree and 87 percent had a Doctoral degree. The number of participants who taught in health education programs at the graduate level (n=72, 75%) was higher than the number of those teaching at the undergraduate level (n= 21, 21.9%). The mean age of participants was 42.6 years old, ranging from 27 to 59 years. A little over half of the respondents work at institutions with adult education programs, though a number (n=12, 11.7%) did state that they did not know whether their university had such a program. Demographic data indicated that participants in the study were well educated, experienced academicians actively involved in the preparation of future health educators.

Table 1. Demographic Data for Overall Sample

Variable	Overall	
	Freq.	(%)
Gender:		
Male	50	(49.50)
Female	51	(50.50)
Ethnic Background:		
African Amer.	3	(3)
Caucasian	89	(89)
Other	8	(8)
Academic Degrees of Respondents:		
Bachelor's	2	(2)
Master's	11	(11)
Doctorate's	87	(87)
Adult Education Program:		
Yes	52	(50.50)
No	39	(37.90)
Uncertain	12	(11.70)
Health Education Degree Programs:		
BS/MS	21	(21.90)
MS/MA	42	(43.80)
Ph.D./EdD	30	(31.30)

The primary purpose of this study was to identify if there was a need for adult education in health education professional preparation programs.

Overwhelmingly, respondents stated *Strongly Agree or Agree* (84.1%) to the statement “*specific training concerning the education practices and theories of*

adult education as applied to health education is needed in health education professional preparation programs.” No statistical significance was noted between stated need for adult education and level of degree offered by the institution ($x=4.07$, $p=0.9365$). Only one third (33.9%, $n=35$) of the individuals surveyed reported that their current programs adequately prepares health educators to teach adult learners. The discrepancy between recognized need and current academic preparation is noteworthy.

Examination of current health education curricula showed variability in how and where academicians believe adult education knowledge was acquired (Table 2). Almost half respondents believed that adult

education principles and theories were addressed in required educational courses outside the health curriculum (46.6%, $n=48$). Almost three-quarters of all participants (72.6%, $n=74$) responded that adult education is not addressed within health education courses. In addition, only 22.8% ($n=24$) of respondents stated that strategies for teaching adults are addressed in health education classes and 30.8% ($n=32$) replied that students practice strategies to teach adults in health education courses. Academicians realize the importance of providing skills to teach adult learners in health education preparation programs and state that this goal would best be met by course work taken under adult education professionals.

Table 2. Inclusion of adult education in current health education curricula.

Question	Strongly Agree		Neutral n (%)	Strongly Disagree		Mean	S.D.
	n(%)	n(%)		Disagree n(%)	Disagree n(%)		
Adult education in addressed Within health education Courses ($n=102$).	7(6.9%)	12(11.8%)	9(8.8%)	59(57.9%)	15(14.7%)	3.61	1.09
Adult education is addressed In other educational courses ($n=100$).	8(8.0%)	40(40%)	21(21%)	29(29%)	2(2%)	3.61	1.09
Strategies for teaching adults Are addressed within health Education classes ($n=105$).	6(5.7%)	18(17.1%)	6(5.7%)	66(62.9%)	9(8.6%)	3.51	1.06
Students practice strategies To teach adults in health Education courses ($n=104$).	6(5.8%)	26(25%)	11(10.6%)	47(45.2%)	14(13.5%)	3.36	1.17

Note: Likert scale values: 1= strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree

Respondents in this survey agreed that the adult education training should be offered in educational classes (47.6%) taught through the adult education program (45.5%) (Table 3). Only 27.8% ($n=29$) stated that adult education training should be conducted within health education courses and 16.8% ($n=17$) responded that adult education training should be the function of the health education program.

Inferential statistics were conducted to determine any significant difference between level of degree program (Bachelor, Master and Doctoral) and need for

adult education programs (Table 4). One-way analysis of variance determined statistical significance among the following variables: belief that the program currently prepares health educators to teach adults learners ($p=0.001$), infusion of adult education in health education courses ($p=0.001$) and extent to which adult education is taught in other educational courses ($p=0.003$). Survey respondents representing graduate-level programs were more inclined to believe that adult education training was addressed in current programs within both health education courses and other educational courses.

Table 3. Inclusion of adult education in future health education curricula.

Question	Strongly Agree		Neutral n(%)	Strongly Disagree		Mean	SD
	n(%)	n(%)		n(%)	n(%)		
Adult education should be through health education program (n=104)	4(3.8%)	25(24%)	8(7.7%)	42(40.4%)	25(24%)	3.56	1.2
Adult education should be through adult education programs (n=103).	4(3.9%)	45(43.7%)	13(12.6%)	31(30.1%)	10(9.7%)	2.98	1.13
Training of health educators to work with adults should be function of health education program (n=104).	0(0.0%)	17(16.3%)	4(3.8%)	53(51.0%)	30 (28.8%)	3.92	0.99
Training of health educators to work with adults should be function of the adult education program (n=99)	6(6.1%)	39(39.4%)	8(8.1%)	34(34.3%)	12 (12.1%)	3.07	0.21

Note: Likert scale values: 1= strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree

Contrarily, respondents representing graduate programs did not differ from undergraduate programs in regards to the perception that adult education needed to be addressed within health education programs. Additionally, no differences were found by programs with regard to where adult education should take place.

Discussion and Recommendations

Health education academicians surveyed overwhelmingly expressed the need for adult education training to be incorporated in the health education curriculum. Significant differences in how programs best address this need at varying degree levels were noted. Participants representing graduate level programs tended to espouse the belief that their curriculum addressed this need in some capacity, but stated room for improvement. Collectively, respondents from undergraduate and graduate programs both declared the need for training of health educators to meet the unique challenges of adult learners. Adult education training is not typically addressed in health education courses. The majority of respondents believed this training would be best accomplished in programs of adult education. In light of these findings, the following recommendations emanate from this study:

1. The health education discipline should fashion curricula to meet the ever-changing needs of constituents and clients. Curricula reconstruction in

response to the newly defined graduate level responsibilities and competencies should incorporate the findings of this study as well.

2. The health education discipline should collaborate interdisciplinary to meet the adult education needs of future health educators. Integration of and reliance on academic resources, expertise and courses offered in areas adult education should be incorporated in the health education professional preparation programs.

3. Adult education principles and theories should be taught in both the undergraduate and graduate health education curricula.

4. Adult education is best offered through collaboration with adult education programs. Appropriate adult education theory and implementation courses should be taken by health educators.

5. Additional studies of this type are warranted to confirm the results of this study.

The researchers acknowledge several methodological limitations to this study. For example, a possible threat to external validity of the findings was the low (but acceptable) response rate to the questionnaire (52.7%). A survey of the HEDIR users is a limited group and could introduce bias into the results. The Likert-type scale allowed participants to respond in a forced-choice option. This might have limited input by the participants. Repeated future

studies need to include a broader population base for some universities offering health education degrees were excluded because members of their faculty are not on the HEDIR listserve.

Summary and Implications

An initial step was taken to explore the role of adult education in health education professional preparation programs at institutes of higher learning. Need assessments of this type are of utmost importance to curriculum development to ensure quality health education programs. With the recent production of

Graduate-level Standards for Health Education (SOPHE/AAHE, 1997) and the initiation of the Competencies Update Project (Kemper, 1998) a unique window of opportunity exists for academicians to creatively redesign and align their curriculum to newly identified responsibilities and competencies of the graduate-level professional. If curriculum designers work collaboratively across disciplines, the health education fields ensures training of future health educators who are equipped to meet the ever-changing needs of adult learners.

Table 4. Statistical significance differences between health education undergraduate and graduate programs.

Source of Variation	One-way Analysis of Variance			
	df	Sums of Squares	F	P Value
The health education program I am associated with adequately Prepares future health educators to teach adult learners.	2	112.19	7.89	0.0099*
The health education program I am associated with requires students to take a course adult education.	2	123.25	7.02	0.0015*
The health education program I am associated with addresses the needs of adult learners through topics in other health courses.	2	94.22	3.62	0.0310*
Adult education as applied to health education is needed in health education professional preparation programs.	2	83.49	0.066	0.9365
Training of future health educators to work with adult learners should be the function of the adult program	2	97.26	0.394	0.0675

*p<.05

Several findings in this study are worth highlighting. The recognized need for future health educators to be grounded in principles and theories of adult education was anticipated and found. An unexpected similarity of stated need for the inclusion of adult education training for both undergraduate and graduate health education programs was discovered. Some discrepancy exists in the perceptions of health professionals as to what adult education principles are

currently taught; this discrepancy warrants further investigation. The researchers hope that this study will serve as a catalyst for discussion to encourage both health educators and adult educators to cross borders between disciplines in order to produce outstanding health educators prepared to serve the needs of adult learners.

These are exciting times for the profession of health education. As health educators decide the role

they will play in the 21st century in the area of health promotion and disease prevention, anticipatory curriculum decision-making to best prepare future health educators to meet the changing needs of the profession is warranted. Integrating academic resources to elicit assistance from programs that can enhance students' preparation to work with target populations is essential if the health education field is to meet future goals. As this study shows, the field of adult education has much to offer health educators; it is up to health educators to determine how to integrate this area of expertise into their professional preparation programs.

References

- Barr-Stein, T. & Connolly, C. R. (1994). The health educator: Nurturing the learning link. In Barr-Stein, T. & Draper, J. A. (Eds.) *The craft of teaching adults* (revised edition). Malabar, FL: Krieger Publishing Company.
- DeMuro, P.R. (1995). *Managed care & integrated delivery systems*. New York, NY: IRWIN Professional Publishing.
- Gilbert, G. G., & Sawyer, R. G. (1995). *Health education: Creating strategies for school and community health*. Boston, MA: Jones and Barlett Publishers.
- Freire, P. (1970). *Pedagogy of the oppressed*. New York: Seabury Press, Inc.
- Houle, C. O. (1988). *The inquiring mind*. (2nd ed.) Madison: University of Wisconsin Press.
- Isaac, S. & Michael, W. B. (1990). *Handbook in research and evaluation*. San Diego, CA: EdITS publishers.
- Jarvis, P. (1987). *Adult learning in the social context*. London: Croom Helm.
- Kemper, K. (Fall 1998). Competencies Update Project. *APHA Public Health Education and Health Promotion Newsletter*, 7-8.
- Knowles, M. (1980). *The modern practice of adult education: From pedagogy to andragogy*. New York: Cambridge Books.
- Knox, A. B. (1980). Proficiency theory of adult learning. *Contemporary Educational Psychology* (5), 378-404.
- McClusky, H. Y. (1971). *Education: Background*. Report prepared for the 1971 White House Conference on Aging, Washington, D.C.
- McDermott, R. J. & Sarvela, P.D. (1999). *Health education evaluation and measurement*. Dubuque, Iowa: WCB Brown & Benchmark.
- McKenzie, J.F. & Smeltzer, J.L. (1997). *Planning, implementing, and evaluating health promotion programs*. Boston, MA: Allyn and Bacon.
- Merriam, S. B. & Caffarella, R. (1991). *Learning in adulthood*. San Francisco: Jossey-Bass.
- Mezirow, J. (1981). A critical theory of adult learning and education. *Adult Education* 32 (1), 3-27.
- National Task Force on the Preparation and Practice of Health Educators. (1995). *A framework for the development of competency-based curricula for entry-level health educators*. New York, NY: National Commission for Health Education Credentialing, Inc.
- Pelletier, K. R. (1996). A review and analysis of health and cost-effective outcome studies of comprehensive health promotion and disease prevention programs at the worksite: 1993-1995 update. *American Journal of Health Promotion*, 10(5), 380-388.
- Shi, L. & Singh, D. A. (1998). *Delivering Health Care in America: A Systems Approach*. Gaithersburg, MA: Aspen Publication.
- SOPHE/AAHE. (1997). *Standards for the preparation of graduate-level health educators*. American Association for Health Education and the Society for Public Health Education, Inc.
- Tough, A. (1979). *The adult's learning projects: A fresh approach to theory and practice in adult learning*. (2nd Ed.) Toronto: Institute of Studies in Education.

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