
Regina A. Galer-Unti, Susan M. Miller, and Marlene K. Tappe

ABSTRACT

Advocacy and public policy were determined to be one of the six key focal points for the profession at the Health Education in the 21st Century meeting held in 1995. A content analysis of journals of the member organizations of the Coalition of National Health Education Organizations was conducted to discover whether there was a difference in the number of advocacy and policy initiative-related articles published between the 5-year periods immediately preceding and following this meeting. The titles and abstracts for all research articles and commentaries appearing in the American Journal of Health Education, the American Journal of Public Health, Journal of School Health, Health Educator, Health Education & Behavior, Health Promotion Practice, and the Journal of American College Health were examined using a 10-item descriptor code designed to measure advocacy and policy terminology. Intercoder reliability was 94%. Inference proportions analysis revealed statistically significant differences in the number of articles containing advocacy and policy related keywords ($p<.05$) between the two time periods for only the American Journal of Health Education and the Journal of School Health. A variety of suggestions for increasing the number of advocacy and policy publications is recommended.

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Advocacy committees, advocacy initiatives launched or subscribed to by professional societies (e.g., American Association for Health Education’s Focus on Advocacy), dedicated meetings (e.g., the annual CNHEO Health Education Advocacy Summit), advocacy themetags at conferences, and the development of the CNHEO advocacy website (www.healtheducation advocate.org) are also indicative of the importance of, and growing interest in, advocacy by the profession of health education. Despite this interest in advocacy there is a limited body of research regarding the advocacy-related behaviors of health educators (Holtrop, Price, & Boardley, 2000) and future health educators (Cooper, 1986). There is, however, a growing body of literature in which authors describe the influence of advocacy initiatives on the decisions of policymakers related to health and health education including, but not limited to, lead poisoning (Freudenberg & Golub, 1987), tobacco control (Blaine et al., 1997; Rogers, Feighery, Tencati, Butler, & Weiner, 1995; Tencati, Kole, Feighery, Winkleby, & Altman, 2002), drunk driving (Dejong, 1996), supports for grandparent caregivers (Roe, Minkler, & Saunders, 1995), statewide health promotion initiatives (Howze & Redman), and the credentials of school health educators (Rowher, 1991).

One of the major sources for serving and promoting a field is through the dissemination of knowledge and ideas in professional publications. Many health education professional organizations utilize journals as a vehicle for the dissemination of knowledge and ideas. Because advocacy was identified as a major focal point for the profession and has since been identified as an ethical responsibility of health educators (National Task Force on Ethics in Health Education, 2000) and because professional publications serve as an important tool reflecting the work performed by health educators and aid in the continuing education of professionals, a content analysis of these journals was conducted to ascertain whether advocacy and public policy are indeed being addressed in the refereed journals of the CNHEO member organizations. To date, there has been no other study examining journal entries and health policy and advocacy issues.

Content analysis is a well-established tool for discovering or following trends in the journals of a variety of disciplines (Bennett, Rowe, & Hill, 1991; Leach, Behrens, & Rowe, 1996; Ponterotto, 1986; Williams & Bubholtz, 1999) and has been used in journals in the field of health education (Johnson & Kittleson, 2000). Jackson and Lee (1999) performed a content analysis of epidemiology journals in an effort to determine the nature and extent of policy statements. Content analysis has also been used to discover whether media advocacy influences media content (Schooler & Sundar, 1996). Welle, Kittleson, and Ogletree (1995) also used a content analysis to describe the nature of messages posted during the first year of the health education electronic mail server (HEDIR).

The purposes of this study were to (1) examine journal articles describing advocacy and public policy issues published in journals of the member organizations of the CNHEO from 1990 through 2000 and (2) compare the extent of advocacy and policy-related articles published from 1991 to 1995 with those from 1996 through 2000.

**METHOD**

**Selection of Journals**

CNHEO member organization journals were selected for analysis for three reasons. First, CNHEO has established advocacy as a focal point of the profession, and an assumption can be made that this commitment to advocacy will be reflected in their journals. Second, these journals serve as resources to professionals for continuing education (as exemplified by available certified health specialist [CHES] credits for selected articles) and professional development. Third, journals provide scholarly, peer-reviewed articles, whereas organizational newsletters do not. The journals of the CNHEO member organizations are the American Journal of Health Education (American Association for Health Education); American Journal of Public Health (American Public Health Association); Journal of School Health (American School Health Association); Health Educator (formerly Eta Sigma Gamman; Eta Sigma Gamma); Health Education & Behavior (formerly Health Education Quarterly); Health Promotion Practice (Society for Public Health Education); and the Journal of American CollegeHealth (American College Health Association).

The reason for analyzing the 1991 to 2000 timeframe is that the 1991 to 1995 journals provide baseline data for the comparison of articles published after the 1995 CNHEO forum at which advocacy and policy were identified as a focal point. Because 1 to 12 months are required for publication in the journals (Olgetree, Glover, & Hiu, 1997), 1996 was used as the initial point for the second time period. A 5-year time frame was selected because it is consistent with the time frame used by others to analyze publication trends in social science journals. For example, the Journal of Multicultural Counseling and Development has been analyzed every 5 years since 1986 (Bennett et al., 1991; Leach et al., 1996; Ponterotto, 1986).

**Determinations of Keywords**

The techniques of content analysis delineated by Holsti (1969) were used in construction of the research design. Content analyses that are comparative in nature should employ a methodology in which keywords are extracted from a representative sample of the materials to be analyzed (Holst). Therefore, a representative sample of CNHEO journals comprised of the entire issues of 1991 to 2001 Journal of School Health, 2001 American Journal of Public Health, and 2001 Journal of Health Education were used in the determination of keywords. The Journal of School Health was selected at random from the CNHEO journals for examination because it was determined to be fair and representative of the journals. The 2001 journals were not analyzed in the study itself but were used for keyword discovery and, in the case of the American Journal of Health Education...
(known as the Journal of Health Education in 1991) and the American Journal of Public Health, were used to verify the keywords identified in the Journal of School Health. From this analysis a keyword list of advocacy terminology was generated. These keywords included policy (policies); politics (political, politically); lobbyist(s); lobbying; legislator(s); legislate (legislative, legislation); policymaker(s) (policy making); advocacy; advocate(s); advocated; law(s); bill(s); and act(s) and were grouped into a 10-item descriptor code (Table 1).

**Discovery of Titles and Abstracts**

Two methods were used for the discovery of titles and abstracts of the CNHEO journal articles. In the first approach the Ovid search engine was used to search the Educational Resource Information Center and Current Contents. This approach did not produce all journal listings, and therefore it was deemed appropriate to search the tables of contents for all journals for the appropriate time periods. After collecting all tables of contents information, a determination had to be made regarding how each entry would be catalogued.

Articles were coded by publication type: research; practice; commentary; teaching tips; briefs; and letters to the editors. Only articles (research, practice, commentary types) were chosen for analysis in this study. Practice and research articles provide valuable information to health education professionals, and a selection of them is available to CHESs for continuing education credit. Commentaries typically provide insight into a current event or topic. If a publication was identified as both an article and a commentary according to the tables of contents, it was coded as a commentary.

Journal editors identify articles and commentaries in a variety of different ways. It was necessary to distinguish between articles and commentaries based on examination of the codification system of each journal. In the American Journal of Health Education, articles were identified as those listed under the Continuing Education heading; however, the Study Questions for Continuing Education were excluded. Commentaries were those defined as such according to their titles. In the American Journal of Public Health, articles were identified as those listed under the headings Articles, Featuring, and Special Focus. Commentaries were identified as those under the heading Commentary or those defined as such according to their titles. In the Journal of School Health, articles were identified as those listed under the Articles and Research Papers headings. Commentaries were identified as those under the Commentaries heading. In the Health Educator (known as the Eta Sigma Gamman in 1991), articles were identified as those under the “In This Issue” heading.

All commentaries and articles were examined for inclusion of keywords in either the title or the abstract. When a title or abstract contained more than one of the keywords, it was coded according to the first keyword that appeared in the document. When keywords were found in both the title and the abstract, the coding was based on the title only. Due to the extreme difficulty in differentiation (given the variety of identification schema existing within the various journals), research and practice articles were combined under the heading of “articles.” This aided in utilization of the tables of contents to identify the number of articles contained in each issue, thus providing a denominator for percentage calculation purposes.

**Statistical Analyses**

The statistical analyses included Holst’s (1969) method for determining intercoder reliability, descriptive statistics, and inference for proportions analysis (Shapiro & Markoff, 1997). Descriptive statistics were used to generate information about each journal. These statistics were used to describe the articles and commentaries containing keyword(s) in their titles or abstracts for each time period. An analysis of the journals’ tables of contents provided the total number of articles and commentaries for each time period. An inference for proportions analysis (Shapiro & Markoff) was used to determine whether the number of articles and commentaries containing keywords during the time period 1991 to 1995 was different from the 1996 to 2000 time period. This was not performed on the data from Health Promotion Practice, because its first volume was published in 2000.

**RESULTS**

**Intercoder Reliability**

Holst’s (1969) method was used to determine intercoder reliability between two coders. Using this method, a 94% intercoder reliability was determined. The two coders
who reviewed these documents had previous experience with keyword searches in content analyses and were asked to scan all documents for the keywords.

**CNHEO Journals Collectively**

The frequency of the keywords is presented in Table 1. Policy (policies) was the most common keyword found in the titles and abstracts of any type of publications listed for both time periods, and lobbying and legislator(s) were the least often used. Politics (political, politically) and advocacy were more likely to appear in 1996 to 2000 publications’ titles and abstracts than during the 1991 to 1995 time period.

The percentages of commentaries and articles containing keywords are shown in Table 2. Statistically significant differences were found in the number of articles containing keyword(s) in their titles or abstracts in the Journal of Health Education and the Journal of School Health between the 1991 to 1995 time period and the 1996 to 2000 time period. No statistical analyses were performed on Health Promotion Practice, because its first volume was published in 2000.

The American Journal of Health Education (Journal of Health Education) published a total of 259 articles and 0 commentaries during the 1991 to 1995 time period. Only 4.63% of the articles contained one of the keywords in their titles or abstracts. A total of 190 articles and 9 commentaries were published during the 1996 to 2000 time period. Of those, 11.05% of the articles contained one of the keywords in their titles or abstracts; however, none of the commentaries contained keywords in their titles or abstracts. A statistically significant difference was found (z = 2.58, p < .05) between the number of articles containing keywords

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<td><strong>American Journal of Health Education</strong> (Journal of Health Education)</td>
<td>Research &amp; Practice</td>
<td>259</td>
<td>12</td>
<td>190</td>
<td>21</td>
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<td>67</td>
<td>594</td>
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<td>59</td>
<td>16</td>
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<td><strong>Journal of School Health</strong></td>
<td>Research &amp; Practice</td>
<td>218</td>
<td>20</td>
<td>154</td>
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<td>1</td>
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<td><strong>The Health Educator (Eta Sigma Gamman)</strong></td>
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<td>0</td>
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<td><strong>Health Education &amp; Behavior (Health Education Quarterly)</strong></td>
<td>Research &amp; Practice</td>
<td>167</td>
<td>24</td>
<td>189</td>
<td>25</td>
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<td>12</td>
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<td><strong>Health Promotion Practice</strong></td>
<td>Research &amp; Practice</td>
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<td>—</td>
<td>17</td>
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<td>4</td>
<td>0</td>
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<td><strong>Journal of American College Health</strong></td>
<td>Research &amp; Practice</td>
<td>129</td>
<td>8</td>
<td>141</td>
<td>12</td>
<td>.72</td>
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<td></td>
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Note: Health Promotion Practice was first published in 2000.

*p < .05.
during the 1991 to 1995 time period and
the 1996 to 2000 time period.

The American Journal of Public Health
published a total of 846 articles and 57
commentaries during the 1991 to 1995
time period. Only 7.91% of the articles contained
one of the keywords in their titles or
abstracts. However, 21.05% of the com-
mentaries contained one of the keywords in
their titles or abstracts. A total of 594 articles and
59 commentaries were published during
1996 to 2000. Of those, 10.27% of the ar-
ticles contained one of the keywords in
their titles or abstracts, and 27.12% of the com-
mentaries contained a keyword in their
titles or abstracts. A statistically signifi-
cant difference was not found between the
number of articles containing keywords
during the 1991 to 1995 time period and the 1996
to 2000 time period. A statistically signifi-
cant difference was not found between the
number of commentaries containing key-
words during the 1991 to 1995 time period
and 1996 to 2000 time period.

The Journal of School Health published a
total of 218 articles and 33 commentaries
during the 1991 to 1995 time period. Of
those, 9.17% of the articles contained one
of the keywords in their titles or abstracts.
Only 3.03% of the commentaries contained
one of the keywords in their titles or the
abstracts. A total of 154 articles and 23 com-
mentaries were published during the 1996
to 2000 time period. At least one keyword
was found in the titles or abstracts of
24.68% of the articles and 4.35% of the
commentaries. A statistically significant
difference was found ($z=4.06, p<.05$) between
the number of articles containing keywords
during the 1991 to 1995 time period and the
1996 to 2000 time period. A statistically signifi-
cant difference was not found between the
number of commentaries containing key-
words during the 1991 to 1995 time period
and the 1996 to 2000 time period.

The Health Educator (Eta Sigma
Gamman) published a total of 38 articles
and 0 commentaries during the 1991 to
1995 time period. At least one keyword
was found in the titles or abstracts of 5.26% of
the articles. A total of 35 articles and 0 com-
mentaries were published during the 1996
to 2000 time period. None of the articles
contained one of the keywords in their
titles or abstracts. A statistically significant
difference was not found between the
numbers of articles containing one of the
keywords during the 1991 to 1995 time
period and the 1996 to 2000 time period.

It should be noted that the Health Educa-
tion Monograph Series constitutes a varia-
tion on a special call for manuscripts and,
therefore, were not included with regular
journal submissions.

Health Education and Behavior (Health
Education Quarterly) published a total of
167 articles and 5 commentaries during the
1991 to 1995 time period. Of those, 14.37% of the articles contained one of the key-
words in their titles or abstracts, and 20% of
the commentaries contained one of the
keywords in their titles or abstracts. A total of
189 articles and 12 commentaries were published during the 1996 to 2000 time
period. Only 13.23% of the articles con-
tained one of the keywords in their titles
or abstracts. None of the commentaries con-
tained a keyword in their titles or abstracts.
A statistically significant difference was not
found between the number of articles con-
taining one of the keywords in their titles
or abstracts. A statistically significant dif-
erence was not found between the num-er of commentaries containing one of the
keywords in their titles or abstracts.

Health Promotion Practice published a
total of 17 articles and 4 commentaries in
2000. Only 5.88% of the articles contained
one of the keywords in their titles or
abstracts. None of the commentaries con-
tained one of the keywords. No statistical
analyses were performed on this journal,
because only 2000 issues were analyzed.

The Journal of American College Health
published a total of 129 articles and 1 com-
mentary during the 1991 to 1995 time pe-
riod. Of those, 6.20% of the articles con-
tained one of the keywords in their titles
or abstracts. None of the commentaries con-
tained one of the keywords in their titles
or abstracts. A total of 141 articles and 0 com-
mentaries were published during the 1996
to 2000 time period. At least one keyword
was found in the titles or abstracts of 8.51%
of the articles. A statistically signifi-
cant difference was not found between the
number of articles containing one of the key-
words in their titles or abstracts.

DISCUSSION

Advocacy and policy, overall, have not
been a focal point of published studies in
the CNHEO journals since the first Health
Education in the 21st Century meeting. Only
the Journal of Health Education and the
Journal of School Health showed a sig-
nificant difference in the number of articles
containing one of the keyword(s) in their
titles or abstract between the 1991 to 1995
time period and the 1996 to 2000 time
period. Some professional organizations and
their journals have been constant support-
ers of policy and advocacy issues. For in-
stance, the American Journal of Public Health
has over 27% of their commentaries con-
taining one or more keyword(s) in their
titles and abstracts. No significant difference
was found, because this journal already
addressed issues of policy and advocacy
in commentaries prior to the 1991 to 1995
time period. It should also be noted that
the American Journal of Public Health is
out of the editorial control of health edu-
cators, so there was no expectation for a
change after the 1995 forum of the
CNHEO organizations.

The Society for Public Health Education's
Health Education and Behavior (Health Edu-
cation Quarterly), where over 10% of the
articles contained one or more keyword(s)
in their titles or abstracts for both time pe-
riods, may have also been committed to the
publication of advocacy and policy articles
prior to 1995. Although too fledgling an
effort to be fully analyzed in this study, it
should be noted that Health Promotion Practice
(volume 1 was printed in 2000) contains multiple articles on advocacy and
policy issues. This is due in part to the sec-
tion titled Politics and Policy. This infusion
of advocacy and policy reflects a strong
commitment to advocacy and policy issues.
and the dissemination of knowledge about these issues.

This study was designed to examine the peer-reviewed material being published within the profession with regard to policy and advocacy. It should be noted that these issues may be addressed by an organization, but in other ways. For instance, newsletters and special issues might be bringing policy/advocacy information to its members. In 1999, the Health Education Monograph Series devoted an entire issue to the importance of advocacy for the profession. This issue was not included in this analysis because it did not meet the criteria of selection for this study. Many of the societies and organizations have developed advocacy manuals (e.g., the American School Health Association).

This research indicates that there is a lack of articles that specifically address advocacy or policy in some of the professional journals of health education. That is not to imply that advocacy and policy are not mentioned within other articles. It is important to point out that information about policy considerations and advocacy work must appear in the abstract or title for the information to appear in databases. Future research endeavors should use qualitative research software to identify policy and advocacy themes existing within the text of an entire article or commentary. Performing such analyses may reveal further keywords, as well as articles that are policy/advocacy in nature, but were not identified as a result of searching titles and abstracts. A similar study to this one should be performed in which articles from recently joined CNHEO organizations (American Academy of Health Behavior’s American Journal of Health Behavior) and non-CNHEO journals (Health Education Research) are analyzed. A survey of editors may identify the reasons for the lack of policy and advocacy publications. Results of these studies may offer elucidation as to the reasons for the dearth of policy and advocacy publications in the journals of the CNHEO organizations.

This study also revealed implications for future content analyses and research involving Ovid electronic searches. Although electronic searches of journal issues from recent years produced accurate and complete titles and abstracts for most journals, this was not found to be the case for all of the journals, including the American Journal of Health Education. For future research in content analysis of health education journals, it will continue to be necessary to check the results of the electronic searches against the tables of contents. Content analyses of only information produced by electronic databases may produce misleading results.

It should be noted, however, that this study is subject of a number of limitations. First, the keywords may have been incorrect and, therefore, may have created bias in the selection process. Second, articles or commentaries may have been incorrectly excluded from analysis because they were omitted during the categorization process. Third, some publications may have incorrectly identified articles or commentaries. Such an error would change the number of articles and commentaries reviewed, thus changing the percentages of articles found to contain keywords.

CONCLUSION

The majority of the CNHEO’s journals did not show a statistically significant difference between the number of keywords identified in titles and abstracts of articles and commentaries published during the 1991 to 1995 time period and the 1996 to 2000 time period. The only statistically significant differences were found in the number of keywords in the titles and abstracts of the American Journal of Health Education and the Journal of School Health articles. It appears that although advocacy for the profession was one of six focal points identified by the participants at the 1995 forum (NCHEC & CNHEO, 1996) and that the graduate health educator is to use evaluation findings in policy analysis and advocate for health policy development (NCHEC, American Association for Health Education, and Society for Public Health Education, 1999), this has not been reflected in the journals of the CNHEO. This research indicates that there is a lack of articles that specifically address advocacy or policy in the professional journals of health education.

Authors should be encouraged to undertake research in and write commentaries about advocacy and policy to increase the number of policy and advocacy submissions. These articles could contain information regarding policy decisions that have affected public laws, insurance decisions, and professional employment. The authors recognize that policy research is not the typical model of research undertaken by health educators. Yet, as we rely more on an environmental approach to health behavior, health education researchers should be encouraged to undertake health policy and advocacy research. Journal editors and editorial boards should embrace the importance of this area by selecting theme topic issues and making a dedicated call for abstracts, designating section headings, and in encouraging manuscript submissions. An emphasis on advocacy and policy-related articles in the literature is an important consideration in the forward momentum of this initiative. If the profession is to fully embrace what was espoused at the 1995 meeting of the professional organizations (NCHEC & CNHEO, 1996), then we must bring articles of interest to the readership of the profession. Encouragement should be provided for authors and more articles regarding policy and advocacy should be offered for CHES credits. Authors should be encouraged to use policy and advocacy, where appropriate, in their keyword selection for cataloguing purposes. This distribution of policy and advocacy outcomes and suggestions will result in a more educated readership. In this way, practicing and future professionals will increase their knowledge of and recognize the importance of policy and advocacy for the profession of health education.

REFERENCES


