Elders' Use of Folk Medicine and Complementary and Alternative Therapies

An Integrative Review With Implications for Case Managers

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ABSTRACT

Purpose of Study: The purpose of this study was to determine the prevalence of complementary and alternative medicine (CAM), folk medicine, and other nontraditional therapy use by the elderly population. Primary Practice Setting: For all case managers who coordinate health care for the elderly as they transition from one setting to another and participate in health promotion and prevention activities. Methodology and Sample: A computerized database search of MEDLINE, CINAHL, ProQuest, and PsycINFO was completed before writing the integrative review. Six hundred ninety-seven abstracts were identified. Fortyfive articles were further screened. Twenty-five articles met the criteria for inclusion. **Results:** The integrative review is composed of 25 articles. Support for folk medicine and CAM use by older adults is located at Levels 5 and 6 of Melynk and Fine-Overholt's Hierarchy of Evidence. Implications for Case Management Practice: Folk medicine and CAM are used by the elderly for self-care purposes. A combination of both nontraditional and traditional medical interventions is used by the elderly. Although the choice to use folk medicine and CAM seems to transcend culture, the specific therapies chosen often emerge from the individual's cultural or ethnic heritage. Traditional health care providers may be unaware of elders' use of CAM or folk medicine alternatives. Case managers as coordinators of care across the health continuum are in a unique position to encourage, support, and enhance the use of folk medicine and CAM that complements traditional medical interventions for the elderly.

Key words: case management, complementary and alternative medicine, elderly, folk medicine, integrative review

everal months ago, the 80-year-old mother of a colleague developed a rash on her chest that progressed to open draining lesions. Instead of bringing this to the attention of her daughter, a nurse, the elderly woman used an old home remedy for "killing germs." She made a solution of chlorine bleach and water and dabbed the solution on her chest lesions. After several weeks, the mother was in severe pain. She asked her daughter to examine her chest, and the daughter, an experienced nurse, was horrified to see lesions seeping foul-smelling drainage on her chest appearing to have severe chemical burns surrounding the lesions. The nurse immediately sought medical attention for her mother. They later learned that the mother had methicillin-resistant Staphylococcus aureus infection, which she may have contracted during a previous hospitalization. In addition, the mother had significant cellulitis from the severe skin irritation she had sustained as a result of the chlorine bleach applications.

This short story illustrates that, at times, individuals will attempt to self-medicate or self-treat with folk or home remedies from their past, even though the medical situation may indicate a very different approach. This is an extreme example, but it demonstrates how individuals may use or seek alternative methods instead of the more traditional medical approaches. Certainly, a number of nontraditional interventions are safer and more effective than the home remedy this woman sought. However, there is strong evidence that the use of nontraditional medicine among the elderly is high; in one study, as many as 63% of those surveyed were using some form of

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complementary or alternative medicine (Cheung, Wyman, & Halcon, 2007). This has pervasive implications for the health care system and for those who coordinate health care services throughout the continuum. Case managers have contact with individuals as they transition from one setting to another and as they participate in any number of health promotion and prevention activities. Therefore, it is a necessity that case managers are familiar not only with complementary and alternative medicine (CAM) therapies but also with the prevalence and use of CAM among their elderly clients. The purpose of this investigation was to determine the prevalence of CAM, folk medicine, and other nontraditional therapy use by the elderly population. To retrieve evidence regarding this prevalence, an integrative review of the literature was initiated.

METHODS

Inclusion criteria and a plan for data extraction were developed and mutually agreed upon by all three authors before conducting the integrative review. One author performed a computerized search of the MEDLINE, CINAHL (Cumulative Index to Nursing and Allied Health Literature), ProQuest, and PsycINFO databases using the search terms "complementary therapies," "folk medicine," "prayer," and "home remedies." The searches were limited to articles that involved humans, adults older than 60 years, U.S. citizenship, and English language publications from 2001 to 2013, yielding 697 articles. The abstracts for research reports among these articles were carefully reviewed to determine whether the study design included examination of information regarding CAM use among the elderly. The resulting 45 articles, which consisted of published guidelines, survey, and observational studies, were further screened to identify those focused exclusively on the prevalence of CAM use by the elderly in the United States, with a yield of 24 articles. Reference lists for these 24 articles were then manually searched to identify additional relevant research reports, and one additional article was identified. A total of 25 articles were included in the review.

From each article, information was extracted regarding the sample size and the variables evaluated for their relationship to the use of folk medicine, prayer, nutrition, herbs and supplements, as well as analytical methods, findings, and limitations. The level of evidence for each study was ranked using a 7-level scale (Melnyk & Fineout-Overholt, 2011) ranging from Level I (systematic review or meta-analysis of all relevant randomized controlled trials, or evidence-based clinical practice guidelines based on integrative reviews) to Level VII (opinion of authorities and reports of expert committees). Figure 1 includes an adapted version of the Melnyk and Fineout-Overholt pyramid including a description of the seven levels of evidence used to evaluate each included article.

RESULTS

The final sample consisted of 25 reviews of the literature and observational studies. These can be reviewed in Table 1, which describes the level of evidence, purpose, method, sample size, and findings. Generally, the level of evidence represented by the identified articles was medium to low, with most articles based on surveys and integrative reviews of previous studies. Many of the studies were based on descriptive data utilizing convenience or nonrandomized samples. However, because there is limited research on the topic, all the studies were included in the review. Figure 1 illustrates the hierarchical placement of the 25 descriptive or qualitative article reviews.

LEVELS OF SUPPORT FOR CAM USE AND THE ELDERLY USING THE MELNYK AND FINEOUT-OVERHOLT PYRAMID

The use of folk medicine and CAM by the elderly was supported by studies cited in Table 1. The growth of CAM use in the elderly, as well as the growing use of CAM and folk medicine in the general population, was supported by several reviews of the literature. Five articles were identified at Level 5 (systematic review of descriptive and qualitative studies) on the Melnyk and Fineout-Overholt pyramid. A brief synopsis of the five articles related to CAM use and the elderly is presented.

Lavretsky (2012) discussed among other things resilience, positivity, sound intellectual functioning, humor, mindfulness, and an engaged and active lifestyle during the process of aging. Easom (2006) and Stolley and Koenig (1997) described the multicultural importance of including spirituality, prayer, religion, and folk remedies as a part of elderly adults health promotion and well-being. The fact that the elderly across various cultural and ethnic groups used

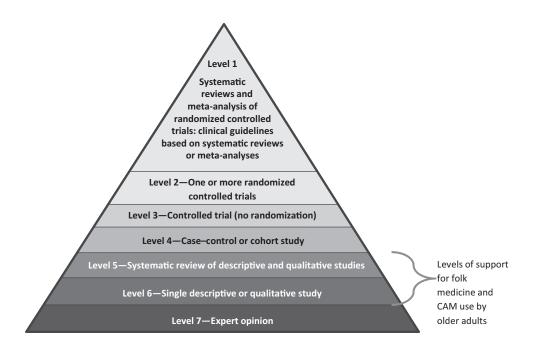


FIGURE 1

The Melnyk and Fineout-Overholt pyramid to illustrate level of evidence for articles reviewed on folk medicine and CAM use in the elderly. CAM = complementary and alternative medicine. Evidence-Based Practice in Nursing and Healthcare: A Guide to Best Practice by B. M. Melnyk and E. Fineout-Overholt, 2011, Philadelphia, PA: Lippincott Williams & Wilkins.

CAM seemed to transcend culture. Knowledge of the importance of this information could help health care professionals design culturally specific interventions to deal with mental or physical illnesses.

Sanderoff (2001) and Stupay and Sivertsen (2000) reviewed the literature on the use of herbs and supplements by the elderly. The elderly used both folk and CAM therapies in conjunction with more traditional forms of medical care, which often occurred without consultation with their health care providers. Health care providers need knowledge of the interaction between herbs and supplements and traditional Western medications.

The use of CAM and folk medicine in the elderly and general population was supported by large and small survey studies. Twenty articles were identified

The elderly used both folk and CAM therapies in conjunction with more traditional forms of medical care, which often occurred without consultation with their health care providers. Health care providers need knowledge of the interaction between herbs and supplements and traditional Western medications.

at Level 6 (single descriptive or qualitative study) on the Melnyk and Fineout-Overholt pyramid. Brief synopses of the 25 articles are presented.

Several large survey studies described CAM and folk medicine use among the elderly and general population. Tindle, Davis, Phillips, and Eisenberg (2005) found that between 1997 and 2002, CAM use was stable in the general population with no exception; there was an increase in use by elderly females. Grzywacz et al. (2007) discovered that White, Black, Hispanic, and Asian elderly use CAM as one strategy to manage care, although many combined it with more traditional therapies. Mackenzie, Taylor, Bloom, Hufford, and Johnson (2003) determined that White, African American or Black, Latino, Asian, and Native American CAM use was equally prevalent despite age, although characteristics of the users varied by CAM modality. The results of Conboy et al. (2005) indicated that patterns of CAM use varied by therapy and differences were possibly hidden by heterogeneous groupings in use patterns. The elderly and older adults preferred to use herbal and nutritional supplements. Grzywacz, Suerken, et al. (2006) demonstrated that older adults with self-reported anxiety or depression were more likely to use spiritual practices, relaxation techniques, and nonvitamin products than mentally healthy elders. However, the majority of older adults with self-reported anxiety or depression used CAM for purposes other than treating mental health problems. Brown, Barner, Bohman, and Richards (2009)

TABLE 1

Level of Evidence

Review of Literature for Elders' Use of Folk Medicine and Complimentary and Alternative Therapies

Reference	Level of Evidence Based on the Melnyk and Fineout-Overholt Pyramid	Purpose	Method	Sample Size	Findings
Lavretsky (2012)	Level 5	The purpose of this study was to summarize the literature on resilience and vulnerability factors related to late-life mood and anxiety disorders. The author identifies key concepts and definitions of resilience and reviews psychosocial and biological factors' contribution to resilience that are universal across age groups, as well as factors that are unique to aging. The author reviews currently existing and potentially useful intervention approaches, i.e., mindfulness to promote resilience and well-being as a prevention strategy for late-life mood disorders.	Review of the literature	400 participants	Research on resilience has shifted the focus of psychological investigation and inquiry by increasing the positive rather than reducing the negative in healthy aging. A coherent pattern of characteristics associated with successful adaptation is emerging. These include sound intellectual functioning, the ability to cope with emotions, self-esteem, optimism, altruism, humor, and an engaged and active coping style in the face of adversity.
Easom (2006)	Level 5	The purpose of this article was to clarify and delineate the conceptualization of prayer for nursing research practice with clients from various cultural backgrounds including White, African American, and Hispanic populations.	Review of the literature	Multiple studies with approxi- mately 50–60 participants for each study	The concept of spirituality and folk home remedies may be essential components in the assessment of health promotion and well-being of all individuals. This trend was also apparent in the elderly respondents participating in the various studies.
Stolley 8 Koenig (1997)	Level 5	The purpose of this review of the literature was to determine the influence of religiosity and spirituality in the lives and mental and physical health of African Americans and Hispanics.	Review of the literature	Reviewed several dif- ferent studies on religious, spiritual, and cultural spe- cific beliefs	(1) It is important to view elders in a multicultural sense and also understand that there may be great heterogeneity within cultural or ethnic groups. (2) Knowledge of the impact of religion and spiritual beliefs for ethnic groups can help health care professionals design interventions that are culture specific to the beliefs of individuals. (3) The psychiatric nurse is in a unique position to encourage patients to use healthy religious practices to deal with their illness, whether mental or physical.
Sanderoff (2001)	Level 5	The purpose of this literature review was to describe a number of herbal products commonly used by older people for medicinal purposes.	Review of the literature	Reviewed several different studies on black cohosh, valerian, saw palmetto, St. John's wort, and Gingko biloba.	It is clear that herbs have much in common with prescription medication, including possible powerful effects on the body and the potential for side effects and interactions. Herbs may be safe and effective for home use, but they should be used in the proper forms and with the advice of qualified health care professionals who can offer appropriate guidance.
Stupay 8 Sivertsen (2000)	Level 5	Herbal and nutritional supplement use in the United States is increasing, including use among older adults. Often, older adults do not inform their health care providers that they are using dietary supplements.	Review of the literature		Health care provider education about herbal and nutritional supplements is requisite

TABLE 1 Review of Literature for Elders' Use of Folk Medicine and Complimentary and Alternative Therapies (Continued)

Reference	Level of Evidence Based on the Melnyk and Fineout-Overholt Pyramid	Purpose	Method	Sample Size	Findings
Tindle et al. (2005)	Level 6	The purpose of the study was to examine changes in the use of CAM therapy between 1997 and 2002, using comparable definitions of CAM use.	Design com- parison of two national surveys of CAM use by U.S. adults	Two studies: Sample size = 31,044 and 2,055	The prevalence of CAM use has remained stable from 1997 to 2002. More than one in three respondents used CAM in the past year, representing about 72 million U.S. adults. The use of CAM increases in aging populations and its use is highe in females.
Grzywacz et al. (2007)	Level 6	The purpose of the study was to understand the age and ethnic differences in the use of complementary medicine	Personal interviews using the 2002 National Health Interview Survey	30,545 individu- als who were White, Black, Hispanic, or Asian	Many elderly use CAM as one strategy to manage health. May combine with more traditional therapies.
Mackenzie et al. (2003)	Level 6	The purpose of this study was to investigate the sociodemographic characteristics of CAM utilizers in a national probability sample, one containing an oversampling of ethnic minorities.	Analysis of a subset of data from the 1995 National Com- parative Survey of Minority Health Care of the Common- wealth Fund	3,789 participants	The use of CAM is equally prevalent among White, African American or Black, Latino, Asian and Native American populations in the United States despite age, but characteristics of utilizers vary considerably by specific CAM modality.
Conboy et al. (2005)	Level 6	The purpose was to evaluate the relationships between selected sociodemographic factors and the use of particular types of CAM in the general U.S. population. Although it is well established that sociodemographic factors impact the use of conventional medicine, it is unclear which, if any, influence the use of particular types of CAM.	Survey	2,055	As with conventional medicine use, the patterns of CAM use vary by individual type of therapy considered. Analytically, grouping many heterogeneous practices into the CAM category hides important differences in use patterns. Elderly or older adults tend to gravitate toward herbal and nutritional supplements.
Grzywacz, Suerken, et al. (2006)	Level 6	The purpose of this study was to compare CAM use among adults 65 years and older with and without self-reported anxiety or depression and to investigate the prevalence and predictors of CAM use for treatment by persons with anxiety or depression.	Survey	5,827 adults 65 years and older partici- pated	Older adults with self-reported anxiety or depression were more likely to use spiritual practices, relaxation techniques, and nonvitamin, nonmineral natural products than elders in good mental health. However, for the majority of older adults with self-reported anxiety or depression, CAM was used for purposes other than treating mental health problems.
Brown et al. (2009)	Level 6	The purposes were as follows: (1) to determine which Andersen model variables are related to CAM use by African Americans in the past 12 months, and (2) to determine whether the addition of disease states to the model will explain significant varia- tion in CAM use in the past 12 months.	Survey	4,256 African American adults were surveyed	African American CAM users are middle-aged to older, female, and educated and have more medical conditions (especially pain-related). Users report higher utilization of "traditional" care, indicating that CAM is likely a complement to conventional treatment in this population. Health care providers should use these factors as prompts for inquiring about CAM use in African American patients.

TABLE 1

Review of Literature for Elders' Use of Folk Medicine and Complimentary and Alternative Therapies (Continued)

	Level of Evidence Based on the Melnyk and Fineout-Overholt				
Reference	Pyramid	Purpose	Method	Sample Size	Findings
Cheung et al. (2007)	Level 6	The purposes of this study were to (1) assess the prevalence and patterns of CAM use in a probability-based sample of older adults; (2) describe the characteristics of the older CAM users; and (3) identify factors associated with CAM use/nonuse.	Cross-sectional survey	1,200	CAM use is common in older adults, especially those with health problems. The widespread use of oral supplements combined with not disclosing CAM use to primary care providers is a concern.
Grzywacz, Arcury, et al. (2006)	Level 6	The purpose was to determine whether ethnic differences in elders' use of home remedies are explained by structured inequalities.	In-home survey using ELDER	Sample size was 701	Ethnic differences in elders' use of home remedies are not largely attributed to socially structured inequalities.
Arcury et al. (2009)	Level 6	The purpose of this article was to describe dimensions of complementary therapy use among rural older adults, use these dimensions to delineate sets of complementary therapy use, and describe the personal characteristics related to each set of complementary therapy use.	Interviews	62 African American and White rural older adults	Understanding how older adults include sets of complementary therapies in their health self-management is important for improving their health care resources, expectations, awareness, and priorities.
Kim et al. (2002)	Level 6	The purpose of this study was to describe the use of traditional and Western style medicine by elderly Korean Americans. Health-seeking behaviors and the use of health services included Western medicine, hanbang, the traditional Korean medicine, or both Western and traditional clinics.	Korean interview questionnaire	205 participants	Hanbang composed of cha'im/ acupuncture, hanyak/traditional herbal medicine, dum/moxibus- tion, buhwang/cupping, and traditional Western medicine may be used concurrently.
Loera et al. (2001)	Level 6	The purpose of this study was to determine the characteristics among older Mexican Americans that correlate with the use of herbal medicines.	Regional cross- sectional survey used in-depth home interviews in Texas, New Mexico, Colo- rado, Arizona, and California	2,734 Hispanic respondents	Herbal medications are relatively common among older Mexican Americans with chronic medical conditions, particularly among those with limited financial resources and those who are very frequent users of formal health care services.
Najm et al. (2003)	Level 6	The purpose of the study was to explore whether the elderly are high users of CAM and to determine which modalities they use. The authors also sought to describe patterns and positive predictors of CAM use among three ethnically diverse groups of community-residing elderly.	Spanish and Vietnamese questionnaire developed to guide personal interviews	525 commu- nity-residing elderly completed personal interviews	Findings indicated a high use of CAM among the elderly and emphasized the likelihood that elderly immigrants use those therapies with which they are familiar.

TABLE 1 Review of Literature for Elders' Use of Folk Medicine and Complimentary and Alternative Therapies (Continued)

Reference	Level of Evidence Based on the Melnyk and Fineout-Overholt Pyramid	Purpose	Method	Sample Size	Findings
Kong & Hsieh (2012)	Level 6	The purpose of this article was to describe the use of traditional and Western medicine by Korean American elderly and factors that are associated with their health-seeking behaviors and health service utilization. The findings revealed that health service utilization among Korean American elderly covered a broad spectrum of health resources, including the use of Western medicine, the traditional Korean medicine, or both Western and traditional clinics.	Interviews	612 Korean American elderly resid- ing in the greater Balti- more area	The findings show that health service utilization among Korea American elderly covers a broad spectrum of health resources, including the use of Western health care services, the traditional Korean medicine or both Western and traditional clinics.
Applewhite (1995)	Level 6	The purpose of this study was to explore cultural knowledge, belief and faith systems, and health care preferences of elderly Mexican Americans.	Ethnographic interviews used a combination of in-depth, semistructured and interactive questions	25 Mexican American elderly partici- pants	Although participants relied on modern medicine to treat serious injuries and major health problems, they still considered traditional folk healing a viable alternative in situations in which modern health care was unsatisfactory or ineffective.
Samsell et al. (2004)	Level 6	The purpose of this study was to examine folk medicine use among a sample of community-dwelling rural elderly West Virginians.	12 focus groups	101 individu- als 60 years and older across six West Virginia counties	Rural elders continue to use a variety of folk medicine techniques; emergent themes of folk medicine use included homeopathic medicine, home remedies midwifery, and local remedies.
Burge 8 Albright (2002)	Level 6	The purpose of this study was to understand CAM use by family practice patients in the unique cultural setting of South Texas.	Survey completed in six family practice resi- dency programs in South Texas	575 participants	In South Texas, many Latino patients across all age groups and seen in family practices use CAM to improve their health, bu most are not using treatments promoted by health clubs or health food stores.
Arcury et al. (2006)	Level 6	This study describes CAM use among rural older adults with diabetes, delineates the relationship of health selfmanagement predictors to CAM therapy use, and furthers conceptual development of CAM use within a health selfmanagement framework.	Survey using ELDER	701 participants	The majority of respondents used some form of CAM for general purpose, whereas far fewer user CAM for diabetes care. The moswidely used CAM categories were food home remedies, other home remedies, and vitamins.
Cheung (2012)	Level 6	The purpose of this study was to describe the experiences of using CAM in community-dwelling older women with arthritis.	Descriptive qualitative focus groups	27 older female CAM users	Findings revealed that older women are motivated to use CAM, particularly nutritional supplements, to manage arthriti symptoms without seeking med cal advice from their physician. Strategies are needed to improve communication between health care providers and older patient on CAM use for optimal management of arthritis and prevention of adverse events.

TABLE 1Review of Literature for Elders' Use of Folk Medicine and Complimentary and Alternative Therapies (Continued)

Reference	Level of Evidence Based on the Melnyk and Fineout-Overholt Pyramid	Purpose	Method	Sample Size	Findings
Dolby (1998)	Level 6	The purpose of this review was to determine how cranberry juice works to decrease UTIs.	Review of the literature.	153 elderly women for one study; 16 children with spina bifida and UTIs; 13 indi- viduals with urostomies in another study	Cranberry juice and cranberry extract were found to have an anti-UTI action in the elderly and child sample. Patients with urostomies had improved skin conditions as well.
Shreffler- Grant et al. (2005)	Level 6	The purpose of this study was to explore complementary therapy use among older rural adults. The objectives of were to explore use, cost, and satisfaction with the quality and effectiveness of CAM.	Descriptive survey	Random sample of 325 older adults from rural com- munities in Montana and North Dakota.	The use of CAM by rural community-dwelling older adults equals that of the national average. Sel directed complementary practices for health promotion and complementary care were used. Relatively little out-of-pocket expenses are incurred. Rural elders share CAM information with their health care providers.

found that African American CAM users were middle-aged to older, female, and educated and experienced more medical conditions (especially pain). Cheung et al. (2007) indicated that older adults with health problems commonly used CAM, especially oral supplements, and did not share CAM use with providers.

Numerous smaller studies supported the use of CAM and traditional folk medicine among the elderly and general population. Grzywacz, Arcury, et al. (2006) determined that ethnic differences in elders' use of home remedies were not largely attributed to socially structured inequalities. Arcury et al. (2009) determined that African American and White rural elderly adults included sets of complementary therapies in health self-management to improve the use of health care resources, awareness, and priorities. Kim, Han, Kim, and Duong (2002) discovered that elderly Korean Americans used a combination of health resources to include Western health care services, traditional Korean medicine, or both. Loera, Black, Markides, Espino, and Goodwin (2001) identified herbal medication use as common among chronically ill poor Mexican Americans. Najm, Reinsch, Hoehler, and Tobis (2003) identified a high use of CAM therapies among community-dwelling Spanish and Vietnamese elderly immigrants. Kim et al. (2002) noted that elders used traditional Korean medicine "hanbang" and Western medicine

concurrently. Applewhite (1995) documented Mexican American elders' use of traditional folk healing for major health problems when modern medicine was unsatisfactory or ineffective. Samsell, Spencer, and Goins (2004) included the use of homeopathic medicine, home remedies, midwifery, and local remedies by the rural elderly.

Burge and Albright (2002) determined that all age groups in a South Texas family practice group used CAM. Of interest was that these groups did not use treatments promoted by health clubs or health food stores. Arcury et al. (2006) indicated that few CAM therapies were used for diabetes care. The majority of general care CAM use was food remedies, other home remedies, and vitamins. Cheung (2012) discussed that community-dwelling women use CAM in the form of nutritional supplements to manage arthritis without seeking medical advice from a physician. Dolby (1998) demonstrated that drinking cranberry juice, considered a folk medicine cure, does prevent the recurrence of urinary tract infection, although the exact reason is unclear. Shreffler-Grant, Weinert, Nichols, and Ide (2005) discovered that CAM use by community-dwelling rural older adults from Montana and North Dakota equaled that of the national average and self-directed complementary practices for health promotion and complementary care, while used, required relatively little out-of-pocket expense. Their findings indicated that this sample of rural

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elders shared CAM information with their health care providers.

Factors that emerged from this review were as follows: (a) use of folk medicine and CAM were common in the elderly; (b) increased use of CAM in the elderly seemed related to the high cost of traditional medical interventions; (c) nontraditional medical therapies was used in conjunction with traditional medical interventions; (d) the therapies chosen often emerged from the individual's cultural or ethnic heritage; and (e) the elderly, who do use CAM or folk medicine alternatives, tend not to share this information with their health care providers (see Table 1).

Discussion

This review contained important considerations for the case manager. It was obvious that the use of folk medicine and CAM was increasing in the general population and has been growing in popularity for a number of years. So, it was not surprising that it was attracting or maintaining the interest of elderly individuals. It appeared that much of CAM use in the elderly seemed to be herbal and/or nutritional in nature and followed their ethnic and cultural heritage.

The fact that many elderly did not share CAM use with providers, who coordinated their medical therapy, has implications for case managers. Some of their CAM choices may interfere or even negate the outcomes targeted by their traditional medications. Therefore, it is critical that any herbs or nutritional supplements are considered along with their traditional medications. Case managers want to empower patients to self-care, but there must be synergy between their traditional and nontraditional choices. It is important, therefore, to query the use of all herbs or supplements that are ingested or applied to the body. Case managers may have to actively pursue this information because patients tend not to relate this information readily.

When one considers the physiology of the elderly as well as the diseases that are often seen in the elderly, one has to consider that just as traditional medications are absorbed and metabolized differently, nontraditional therapies might affect the elderly in a more profound manner. Therefore, case managers not only need to understand popular herbs and

supplements but also must be knowledgeable about how these might affect elders.

Case managers should have knowledge of CAM solutions because these do provide an array of modalities that can enhance traditional therapies. Mindfulness of techniques (e.g., relaxation) that enhance stress relief can be very beneficial and even reduce the need for more powerful medications that are often detrimental to well-being of the elderly.

IMPLICATIONS FOR PRACTICE

The studies included in the integrative review illustrated the importance of ethnic and cultural orientation to CAM use by the elderly. Knowledge of CAM use based on ethnic and cultural orientation could assist case managers in assessing the types of choices their patients may make in terms of their health. In addition, elders' cultural preferences could provide an important aspect of their care coordination and healing. Therefore, selected CAM, folk medicine, and other nontraditional therapy could be beneficial for the elderly if used to enhance or supplement traditional medical interventions.

Knowing that elders frequently did not share information about nontraditional therapies with health care providers should prompt case managers to include questions about herbs, supplements, and stress relief techniques into their care management. In their assessment and plan of care, case managers should review all current medications and CAM choices to ensure that there are no known possible harmful interactions. Within the context of the patient's age and ethnic and cultural background,

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the case manager should research the CAM choice to provide appropriate education. In addition, continual assessment and evaluation of the effect of elders' CAM choices related to their care management should be routinely conducted.

LIMITATIONS

This integrative review was limited to a review of published research, which may have resulted in a publication bias in the findings. Dissertations, unpublished research, white papers, and position statements were not accessed. Because studies reporting significant results were more likely to be published than those reporting nonsignificant findings (Melnyk & Fineout-Overholt, 2011), these findings could be incomplete. Another limitation of this review was the 25 descriptive studies. Future research needs to involve stronger designs such as large case-control and comparison studies that permit computation of relative risk or odd ratios for each factor studied. Design features made comparison across studies difficult or may have confounded the results.

Conclusions

The integrative review of the literature supported elders' use of CAM, folk medicine, and nontraditional therapies in conjunction with their traditional medically prescribed treatments. In addition, many elders' folk medicine and CAM choices were affected by their ethnic and cultural origins. The elderly did not necessarily share nontraditional therapy use with their health care providers. Therefore, case managers, as coordinators of care across various transitions in the health continuum, should assess, educate, and evaluate the use of CAM choices related to medications interactions.

Education related to elders' CAM choices regarding possible interactions and the need to inform their care providers of their nontraditional therapies could impact care outcomes. Case managers have a

Knowing that elders frequently did not share information about nontraditional therapies with health care providers should prompt case managers to include questions about herbs, supplements, and stress relief techniques into their care management (assessment and planning).

Case managers have a responsibility to ensure that CAM, folk medicine, and nontraditional therapies do not interfere with, but support or even enhance, traditional forms of health care.

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