

What Is Integrative Medicine ?

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The demand for complementary and alternative medicine (CAM) is increasing worldwide. High-technology medicine is not always effective and is often accompanied by neglected self-care and high cost. Also, conventional medicine has become dependent on expensive technological solutions to health problems. Integrated medicine is not simply a synonym for complementary medicine. It involves the understanding of the interaction of the mind, body, and spirit and how to interpret this relationship in the dynamics of health and disease. Integrative medicine shifts the orientation of the medical practice from a disease-based approach to a healing-based approach. In South Korea, CAM education was first provided 20 years ago, and integrative medicine is becoming part of the current mainstream medicine. Increasing numbers of fellowships in integrative medicine are being offered in many academic health centers in the U.S. Also, it has emerged as a potential solution to the American healthcare crisis and chronic diseases, which are bankrupting the economy. It provides care that is patient-centered, healing-oriented, emphasizes the therapeutic relationship, and uses therapeutic approaches originating from conventional and alternative medicine.

Key Words: Integrative medicine, Complementary medicine, Alternative medicine, Holistic health, Mind-body medicine

INTRODUCTION

The demand for complementary and alternative medicine (CAM) is increasing worldwide. High-technology medicine is not always effective and is often accompanied by neglected self-care and high cost. Several studies have demonstrated the widespread use and marked growing consumer market related to CAM.¹⁻³

In Germany-Austria-Switzerland, 40 to 80% of the cancer patients use alternative medicine besides or (less frequently) than the conventional anticancer therapy.⁴ It was reported that 33% of the Americans were using alternative therapies such as relaxation techniques, chiropractic methods, massage, and dietary supplements, and the use of these therapies was highest among the most educated. These therapies were

rarely prescribed by physicians, and most of the patients did not tell their physician that they were using these alternative therapies.⁵ More and more patients seek integrative medicine practitioners. By 2007, approximately 40% of all adult Americans had used CAM therapies compared with 33% in 1991, and one in nine children (11.8%) used CAM therapies in 2007.⁶

The number of U.S. hospitals offering integrative therapies like acupuncture, massage therapy, therapeutic touch, and guided imagery has increased from 8% in 1998 to 42% in 2010.⁷ Recent surveys have shown that CAM is widely used in South Korea, with its use ranging from 29% to 53% among various patient populations.⁸⁻⁹ CAM also accounts for a large share of the healthcare costs, and approximately 29% of the out-of-pocket healthcare expenditure in South Korea is for CAM therapies.⁸

Many academic cancer centers offer these integrative practices as part of a full spectrum of care. Other hospitals offer programs in integrative women's health, cardiology, and pain management. Integrative medicine has been defined as 'the practice of medicine that reaffirms the importance of the relationship between the practitioner and the patient, focuses

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on the whole person, is informed by evidence, and makes use of all appropriate therapeutic approaches, healthcare professionals, and disciplines to achieve optimal health and healing'.¹⁰

The National Center for Complementary and Alternative Medicine, which was established in 1998, provides the funds to conduct appropriate trials of these therapies. They have also funded education research and programs in both the conventional medical nursing schools and the complementary and alternative medicine professional schools. The outcomes of these studies are being published in the conventional medical literature.¹¹

EDUCATION OF INTEGRATIVE MEDICINE

In response to the increasing demand for CAM, medical schools are incorporating CAM into their curricula. Many physicians, including those in South Korea, feel that they lack sufficient knowledge of the safety and efficacy of CAM, and wish to receive more education on the CAM modalities.¹²⁻¹⁴ In addition, medical students want to learn more about CAM during their undergraduate studies.¹⁵

In South Korea, CAM education was first provided 20 years ago. Oriental medicine, which can be considered a component of CAM, was formally incorporated into the conventional Western medicine curriculum in 1992. Currently, the Korean Institute of Medical Education and Evaluation (KIMEE) recommends the inclusion of CAM courses in basic medical education. CAM education for the medical students in South Korea, however, is uneven and not well integrated into the mainstream health education. Table 1 shows the organizational aspects of the courses, and Table 2 summarizes the categories of the South Korean medical-school CAM courses.¹⁶

In the United States, integrative medicine began to have an impact on medical education when eight medical-school deans met in 1999 to discuss complementary and alternative medicine, and when the number of medical schools that included CAM education as a required course increased from 75 of the 117 surveyed schools (64%) in 1998 to 113 of the 126 surveyed schools (90%) in 2008.^{17,18} In Canada, a study conducted in the late 1990s reported that even then, 12 of the nation's medical schools (75%) incorporated CAM courses into the undergraduate medical curricula.¹⁹ A more recent

study reported that 40% of the European medical schools provide CAM courses.²⁰ According to a survey of Japanese medical schools in 2001, 16 schools (20%) had introduced CAM into the curriculum.²¹

Table 1. Prevalence and administrative characteristics of complementary and alternative medicine education in Korean medical schools

School and course characteristics	Number (%)
School responding to education survey	41 (100)
Schools with ≥ 1 course	35 (85.4)
on complementary medicine topics	
Required course	34 (97.1)
Elective course	1 (2.9)
Academic credit	
Yes	32 (91.4)
No	3 (8.6)

Table 2. Content of complementary and alternative medicine (CAM) courses offered at 35 Korean medical schools

Topics	Number	%
Introduction of CAM	31	88.6
or integrative medicine		
Mind-body medicine	18	51.4
Acupuncture	10	28.6
Tai chi	3	8.6
Meditation	2	5.7
Yoga	2	5.7
Relaxation	2	5.7
Qigong	2	5.7
Hypnotherapy	1	2.9
Not specified	9	25.7
Natural products	15	42.9
Herbal medicines (botanicals)	3	8.6
Probiotics	3	8.6
Others (nutritional)	11	31.4
supplements body-based practices		
Manipulative and body-based practices	13	37.1
Spinal manipulation	9	25.7
Massage	2	5.7
Not specified	3	8.6
Other CAM practices	23	65.7
Traditional Korean medicine	20	57.1
Homeopathy and naturopathy	11	31.4
Energy field	2	5.7
Other (psychoneuroimmunology, art therapy, mesotherapy, placenta therapy, Pilates, energy, aroma therapy, other)	10	28.6

RESEARCH ON INTEGRATIVE MEDICINE

The first international research conference on integrative medicine was held in 2006, with subsequent research conferences being held in 2009 and 2012.²² Within conventional care, some multidisciplinary approaches to patient care have already laid a foundation for the more fully integrative medicine that could emerge: for example, in geriatrics, developing multidisciplinary special-care teams²³ and end-of-life programs to optimize the quality of life in hospice care²⁴; in chronic pain treatment programs, applying multidisciplinary care to improve individual self-efficacy and quality of life²⁵; in psychiatry, blending social support, psychotherapy, and medications²⁶ as well as emphasizing the patient's responsibility for his or her own recovery²⁷; in family medicine, valuing good physician-patient relationships²⁸ and preventive interventions²⁹; and in behavioral medicine/health psychology, using behavioral interventions to foster self-care and self-efficacy in patients with diabetes³⁰ or arthritis.³¹

Healthcare outcomes research is an emerging field.³² It contributes substantially to the knowledge base of medicine and health care and provides the data necessary for health policy makers.³³

CONCLUSIONS

Integrative medicine is not a combination medicine (CAM added to the conventional), but a whole-person-approach medicine, designed to treat the person, not just the disease. The whole system includes the patient-provider relationship, multiple conventional and CAM treatments, and the philosophical context of care as the intervention. Clinicians and researchers are increasingly using the term integrative medicine to refer to the merging of complementary and alternative medicine (CAM) with conventional biomedicine.

Despite the increasing number of patients seeking alternative therapies, until recently, many of these skills were not routinely offered in medical schools or graduate medical education, yet they are critical competencies and are essential to stemming the tide of chronic diseases that are threatening to overwhelm both the current healthcare and financial systems.

Integrative medicine is becoming part of the current main-

stream medicine. Increasing numbers of fellowships in integrative medicine are being offered in many academic health centers in the U.S.

Now on the horizon is a more pluralistic, pragmatic approach to medicine that is patient-centered, offers the broadest range of potential therapies, and advocates not only the holistic treatment of disease but also prevention, health, and wellness.³⁴

REFERENCES

1. Xue CC, Zhang AL, Lin V, Da Costa C, Story DF. Complementary and alternative medicine use in Australia: a national population-based survey. *J Altern Complement Med* 2007;13: 643-50.
2. Rössler W, Lauber C, Angst J, Haker H, Gamma A, Eich D, et al. Ajdacic-Gross V. The use of complementary and alternative medicine in the general population: results from a longitudinal community study. *Psychol Med* 2007;37:73-84.
3. Hyodo I, Amano N, Eguchi K, Narabayashi M, Imanishi J, Hirai M, et al. Nationwide survey on complementary and alternative medicine in cancer patients in Japan. *J Clin Oncol* 2005;23:2645-54.
4. Molassiotis A, Fernadez-Ortega P, Pud D, Ozden G, Scott JA, Panteli V, et al. Use of complementary and alternative medicine in cancer patients: a European survey. *Ann Oncol* 2005;16:655-63.
5. Eisenberg DM, Kessler RC, Foster C, Norlock FE, Calkins DR, Delbanco TL. Unconventional medicine in the United States. Prevalence, costs, and patterns of use. *N Engl J Med* 1993;328:246-52.
6. Barnes PM, Bloom B, Nahin RL. Complementary and alternative medicine use among adults and children: United States, 2007. *Natl Health Stat Report* 2008;10:1-23.
7. Ananth S, Martin W. Health forum 2005 complementary and alternative medicine survey of hospitals: summary of results. Chicago: Health Forum LLC; 2006.
8. Lee SI, Khang YH, Lee MS, Koo HJ, Kang W, Hong CD. Complementary and alternative medicine use in Korea: prevalence, pattern of use, and out-of-pocket expenditures. *Korean J Prev Med* 1999;32:546-55. Korean.
9. Chae BJ, Song BJ, Kim SS, Kim SK, Jun KH, Song KY, et al. Use of complementary and alternative medicine by gastric cancer patients. *J Korean Surg Soc* 2007;72:369-78. Korean.
10. Consortium of Academic Health Centers for Integrative Medicine (CAHCIM). Minneapolis: CAHCIM [Internet]. [Cited 2013 October 12]. Available from: <http://www.imconsortium.org>.
11. CAM Research Education Partnership Project. Bloomington: Northwestern Health Sciences University [Internet]. [Cited 2013 October 12]. Available from: <http://nccam.nih.gov/node/4568?nav=gsa>.
12. Schachter L, Weingarten MA, Kahan EE. Attitudes of family physicians to nonconventional therapies. a challenge to science

- as the basis of therapeutics. *Arch Fam Med* 1993;2:1268-70.
13. Berman BM, Singh BK, Lao L, Singh BB, Ferentz KS, Hartnoll SM. Physicians' attitudes toward complementary or alternative medicine: a regional survey. *J Am Board Fam Pract* 1995; 8:361-6.
14. Kang SW, Ha TG, Cho BH, Lee SC, Han DS, Lee KM, et al. Comparison of knowledge, attitude, and experience about complementary and alternative medicine between primary care physicians and academic physicians in Korea. *J Korean Med Assoc* 2011;54:217-29.
15. Chaterji R, Tractenberg RE, Amri H, Lumpkin M, Amorosi SB, Haramati A. A large-sample survey of first- and second-year medical student attitudes toward complementary and alternative medicine in the curriculum and in practice. *Altern Ther Health Med* 2007;13:30-5.
16. Kim DY, Park WB, Kang HC, Kim MJ, Park KH, Min BI, et al. Complementary and alternative medicine in the undergraduate medical curriculum: a survey of Korean medical schools. *J Altern Complement Med* 2012;18:870-4.
17. Wetzel MS, Eisenberg DM, Kaptchuk TJ. Courses involving complementary and alternative medicine at US medical schools. *JAMA* 1998;280:784-7.
18. American Association of Medical Colleges. U.S. medical schools teaching selected topics: 2008 LCME Part II Annual Medical School Questionnaire [Internet]. 2008 [cited 2013 October 12]. Available from: http://services.aamc.org/currdir/section2/04_05hottopics.pdf.
19. Ruedy J, Kaufman DM, MacLeod H. Alternative and complementary medicine in Canadian medical schools: a survey. *CMAJ* 1999;160:816-7.
20. Varga O, Márton S, Molnár P. Status of complementary and alternative medicine in European medical schools. *Forsch Komplementmed* 2006;13:41-5.
21. Tsuruoka K, Tsuruoka Y, Kajii E. Complementary medicine education in Japanese medical schools: a survey. *Complement Ther Med* 2001;9:28-33.
22. Consortium of Academic Health Centers for Integrative Medicine. Past research events [Internet]. [Cited 2013 October 12]. Available from: <http://www.imconsortium.org/pastresearchevents>.
23. Burns R, Nichols LO, Martindale-Adams J, Graney MJ. Interdisciplinary geriatric primary care evaluation and management: two-year outcomes. *J Am Geriatr Soc* 2000;48:8-13.
24. Bretscher M, Rummans T, Sloan J, Kaur J, Bartlett A, Borkenhagen L, et al. Quality of life in hospice patients. a pilot study. *Psychosomatics* 1999;40:309-13.
25. Merboth MK, Barnason S. Managing pain: the fifth vital sign. *Nurs Clin North Am* 2000;35:375-83.
26. Rydman RJ, Trybus D, Butki N, Kampe LM, Marley JA. Outcome of case management and comprehensive support services following policy changes in mental health care delivery. *J Med Syst* 1999;23:309-23.
27. Thiels C, Schmidt U, Treasure J, Garthe R, Troop N. Guided self-change for bulimia nervosa incorporating use of a self-care manual. *Am J Psychiatry* 1998;155:947-53.
28. Marvel MK, Doherty WJ, Weiner E. Medical interviewing by exemplary family physicians. *J Fam Pract* 1998;47:343-8.
29. Ferguson RS. Preventive care in daily practice. *J Okla State Med Assoc* 2000;93:154-60.
30. Anderson RM, Funnell MM, Fitzgerald JT, Marrero DG. The diabetes empowerment scale: a measure of psychosocial self-efficacy. *Diabetes Care* 2000;23:739-43.
31. Lorig K, Seleznick M, Lubeck D, Ung E, Chastain RL, Holman HR. The beneficial outcomes of the arthritis self-management course are not adequately explained by behavior change. *Arthritis Rheum* 1989;32:91-5.
32. Kane RL. Understanding health care outcomes research. Gaithersburg, Md: Aspen Publishers. Inc; 1997.
33. Bell IR, Caspi O, Schwartz GE, Grant KL, Gaudet TW, Rychener D, et al. Integrative medicine and systemic outcomes research: issues in the emergence of a new model for primary health care. *Arch Intern Med* 2002;162:133-40.
34. Sierpina VS, Dalen JE. The future of integrative medicine. *Am J Med* 2013;126:661-2.