

Still-Well osteopathic medical student wellness program

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In 1991, the Kirksville College of Osteopathic Medicine in Kirksville, Missouri, initiated a wellness program for its first- and second-year medical students. The program was based on the concept that to practice and promote preventive medicine, students must first understand and integrate wellness practices and theory into their own lives. With nearly 11 years of experience, the Kirksville College of Osteopathic Medicine offers a wellness program to its students that addresses areas of their personal, professional, and physical development of mind, body, and spirit. Voluntary student participation has been exceptional, and research at KCOM was initiated to determine to what extent the program was working to modify the wellness of its medical students.

(Key words: Kirksville College of Osteopathic Medicine, Still-Well wellness program, health promotion, lifestyle, attitudes)

Based on a recent national study, the Kirksville College of Osteopathic Medicine (KCOM) in Kirksville, Missouri, has one of the most extensive and successful wellness programs among US medical schools.¹ The study indicates that only 32 (20%) of 141 allopathic (MD) and osteopathic (DO) medical schools surveyed provided a health promotion program for students.

"I am my own first patient" is the theme of the medical student wellness program at KCOM. Started in 1991, the program focuses on mind (emotional, intellectual, and vocational development), body (physical development), and spirit (environmental and spiritual development).

Little is known about students' lifestyle commitment to healthy behaviors. Despite this lack of information, physicians will often be responsible for their patients' attitudes regarding lifestyle and health.²

The student wellness program focuses on healthy behaviors and is primarily designed for first- and second-year stu-

dents. Efforts are being made to expand the program into the regional clinical training sites throughout the United States. In 1991, 41 of 290 eligible students voluntarily enrolled in the wellness program. Each year since, student involvement has increased, reaching a high point in 1998, when 268 (92%) of 290 of the students voluntarily participated.

Orientation

Still-Well, named after the founder of KCOM and osteopathic medicine, Andrew Taylor Still, MD, DO, is first introduced to students during orientation. Considerable time is allocated to explain the benefits and expectations of voluntary involvement in the wellness program. Special emphasis is placed on the fact that KCOM promotes and educates students in the practice of preventive medicine. Wellness is considered the cornerstone for each student to model for future patients.

The Still-Well program is focused on more than exercise and diet. Still-Well strives to promote comprehensive wellness by which each participant is encouraged and educated to achieve a balance in the areas of physical, emotional, spiritual, vocational, environmental, intellectual, and social wellness—mind, body, and spirit.

A statement by the American Heart Association³ that medical schools should prepare physicians to recommend exercise certainly reinforces one of the Still-Well goals.

Benefits

KCOM has deliberately created numerous benefits for students who choose to participate in the wellness program. The benefits act as catalyst, reinforcer, and reward to the participants. The benefits include, but are not limited to:

- 2 hours of free racquetball play per week;
- free aerobic classes three times per week;
- complimentary Still-Well T-shirt each year at the completion of the fitness assessment;
- quarterly wellness newsletters;
- extra points toward the final grade in the osteopathic manipulative medicine course pending verification of participation in the wellness seminar series;
- preparticipation physical examination;
- 6-month fitness assessment;
- end-of-year recognition banquet, keynote speaker on a wellness topic, and a gift to each participant;
- second-year students in the Still-Well program gain addi-

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MEDICAL EDUCATION

tional clinical experience by performing structural analysis and basic physical examination skills during the preparticipation health examination for new Still-Well participants; and

- second-year students in the Still-Well program learn how to write and implement a fitness prescription and wellness program for first-year students.

Interdisciplinary team

The Still-Well program began through the efforts of the vice president/dean of students and the director of the campus center. It was clear, however, that clinical and basic science faculty, students, and staff needed to be an essential part of the planning, implementation, and assessment of the wellness program. Within 2 years, a committee was established that included physicians as co-medical directors, basic science faculty as researchers, and student affairs staff and students involved with assessment and programming. The involvement of interdisciplinary planning, implementation, and evaluation was a key factor in the successful growth, promotion, and acceptance of the wellness program among students, faculty, and administration. To increase involvement outside the Still-Well Committee, team leaders were chosen to chair a committee of students, faculty, and staff to promote wellness activities in the seven developmental areas.

Funding

The wellness program relies on the voluntary efforts of faculty, administrators, and students. No financial, time-off, release-time, or other type of compensation is given to those involved with the Still-Well Committee.

After the second year, a budget was established to support the activities of the wellness program. The budget grew from \$2000 in 1993 to \$7000 in 1998. In addition to institutional funds, corporate sponsorship was received for 3 years at \$4000 per year. A grant of \$4000 was received from the KCOM Warner/Fermaturo Fund and a grant of \$5500 was received from the Alumni Association in 1998-1999 to support the seminar series of Still-Well.

Research

In 1997, another milestone was reached in the development of the wellness program. A grant was submitted and subsequently funded to research whether the Still-Well program was successful. The research study provided a means to evaluate the physical fitness and psychospiritual benefits of students participating in the program versus those who were not. The American Osteopathic Association funded the research project, "The Impact of an Organized Wellness Program on First-Year Osteopathic Medical Students," in year 1 for \$17,500 and year 2 for \$42,000.

The grants allowed researchers to establish baseline data on physical fitness testing at the beginning and end of each year and establish weekly records of frequency and intensity of

student exercise, level of stress, and use of healthcare services. Furthermore, the research project provided for a comprehensive assessment every 5 weeks to evaluate psychological benefits. This evaluation included obtaining information from participants on the number of visits they made to a healthcare provider, the diagnosis for each visit, and the cost for services and treatment. In year 2 of the research, another osteopathic medical college similar to KCOM was used as a control group. Initial evaluation by students indicates that most have a positive attitude toward the wellness program at KCOM.

A wide range of data has been collected from three classes of medical students.⁴⁻⁶ Evaluation of fitness assessment at the onset of medical school indicated that incoming KCOM students were more physically fit than individuals in the general population.⁴ All entering students completed a survey indicating sources of stress in their lives. Areas of greatest stress before beginning school were concerns over owing money and feeling time pressure.⁵

Students' lifestyles changed significantly in the course of the first year of medical school. In the first quarter of school, students had a decline in exercise, leisure activity, and sleep. During the course of the year, however, students gradually resumed most pre-enrollment lifestyle habits.⁶ Areas of perceived stress among these students was assessed periodically throughout their first year. Perceived stress declined throughout the year in all areas except academics.⁶ Several more studies are being conducted to evaluate the effectiveness and impact of the wellness program.

Participation

Student participation in the Still-Well program has been excellent. The *Figure* indicates participation rates for the combined first- and second-year classes.

Seminar series

Participants in the Still-Well program can gain additional points toward their final grade in the osteopathic theory and methods class by attending several seminars throughout the various quarters. The seminars are designed to provide students with information, discussion, and interaction on topics that relate to the seven developmental areas of the Still-Well model. Many of the speakers have local and national recognition in their field. Examples of some of the topics covered in the seminar series include the following:

- diversity in medicine;
- high achievement through planning;
- life phases in health and disease;
- early clinical and volunteer opportunities;
- interpersonal relationship building;
- stress management;
- medical career path planning;
- test-taking anxiety;
- catching the spirit of total health;
- high-performance nutrition;

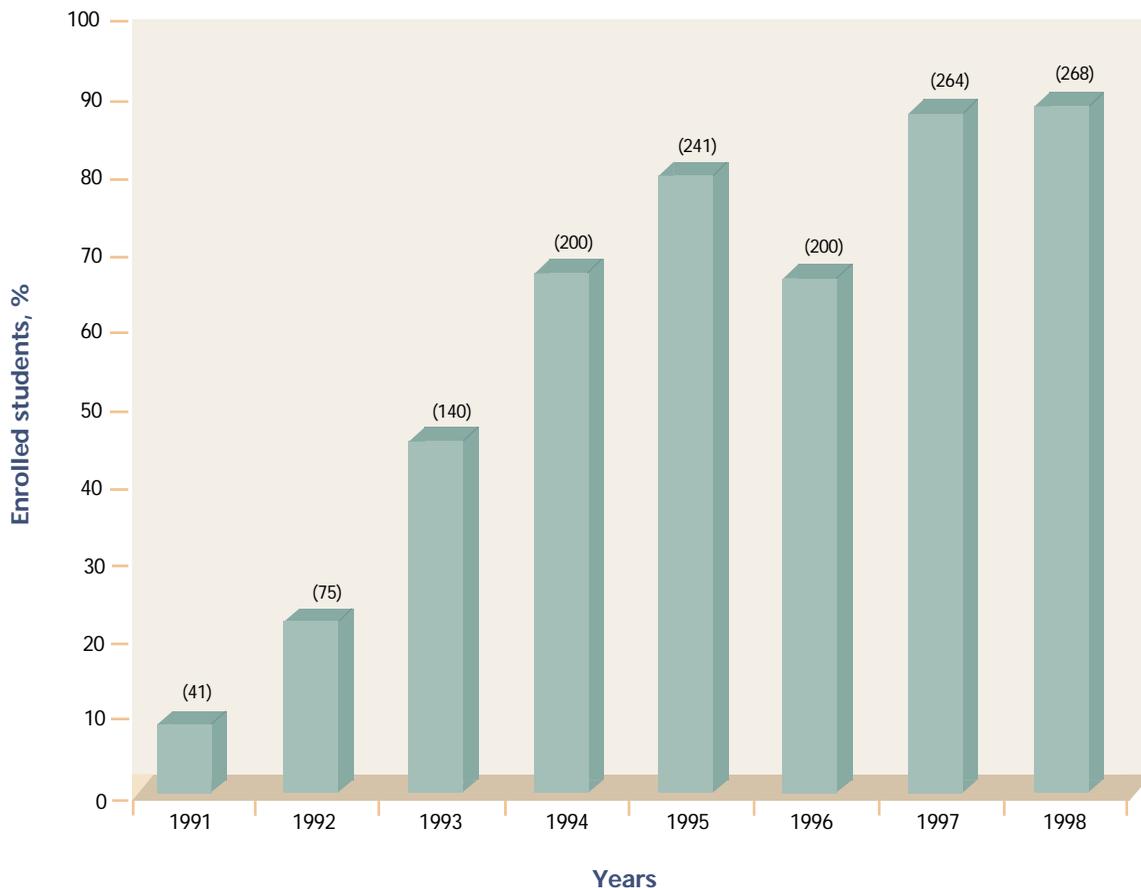


Figure. Still-Well program participation rates for the combined first- and second-year classes. Numbers in parentheses indicate the numbers of participants from a total of 290 first- and second-year students.

- spirituality and healing;
- writing a wellness prescription; and
- resume writing.

Physical examination and physical fitness assessment

The 1996 report of the Surgeon General⁷ on physical activity and health brings together what has been learned about physical activity and health from decades of research. Regular physical activity improves health by reducing feelings of depression and anxiety, promoting psychological well-being, and reducing numerous physical ailments.

The Still-Well program encourages students to engage in activities and lifestyle choices that reduce their level of stress and increase their ability to cope with the demands of medical school. General levels of physical activity and physical fitness are personally tested.

The students undergo a physical examination and physical fitness testing within the first 3 weeks after their enrollment. They also undergo two follow-up fitness evaluations at 6-month intervals. This process allows for the establishment of a baseline and pretest/posttest to measure (value-added) changes.

At the onset of the program, each participant undergoes a preparticipation physical examination conducted by physicians of the Osteopathic Manipulative Medicine and Family Medicine Departments, as well as residents, interns, nurses, and other Still-Well staff/students. This assessment includes a physical examination, lifestyle assessment questionnaire, height/weight screening, vision examination, biomechanical structural examination, and screening for cardiovascular risk and cancer. Also included in the assessment of all students are measurements of blood lipid levels, resting electrocardiograms, and pulmonary function tests. These data are collected in basic science laboratories but interpreted by faculty. The results of these tests and the examination are used to compare KCOM's students with established national norms.

Physical fitness is assessed three times during the first year of school. The first assessment occurs within a month after arrival at medical school. Students are next evaluated at 6 and 12 months.

Nationally standardized physical fitness tests are administered to each individual during each of these evaluations so that the students can be compared with national norms. The evaluations measure areas of fitness. Cardiovascular risk is

MEDICAL EDUCATION

screened using the waist-to-hip ratio. Strength is measured by vertical jump, combined right-hand and left-hand grip, and a bench press test. Agility is tested using an agility-quad jump test. Flexibility is measured through the use of a sit-and-reach test method. Endurance is evaluated by a 6-minute bike ride testing for a maximum oxygen uptake. The estimated percentage of body fat is used to test body composition. In addition, body weight, blood pressure, and resting heart rate are measured before beginning the tests on each test date.

Comments

The Still-Well osteopathic student wellness program at the Kirksville College of Osteopathic Medicine has witnessed significant growth and support among students, faculty, and staff. The wellness program focuses on promoting comprehensive wellness by which medical students are encouraged and educated to achieve a balance in the areas of physical, emotional, spiritual, vocational, environmental, intellectual, and social wellness.

Motivated by the theme, "I am my own first patient," and empowered by the Still-Well wellness program's emphasis on the importance of treating mind, body, and spirit, KCOM students have a unique understanding and desire to practice preventive medicine for themselves and for their future patients.

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