Slicing the Apple: Health Issues on the College Campus

Brian Cox IDC 6035 Infographic Design Paper December 7, 2009

The old saying "an apple a day keeps the doctor away" may no longer apply when it comes to health issues on college campuses. While college students have always presented a challenge for health care workers, several factors are causing them to look at new and more comprehensive approaches for dealing with their students' health.

The changes in approach to campus health issues reflect the new factors that have arisen as a result of changes in college demographics. These changes include a large increase in the number of college students, an influx of foreign exchange students, an increase in older college students, and an increased awareness in mental and behavioral health issues (Grace, 1997). Due to these factors campus health care providers are looking at the complete "wellness" of the students and taking a broader approach that focuses on the entire well-being of the students. This approach includes not only freedom from disease, but also considers the students' mental health, nutritional intake, use of tobacco and alcohol and sexual behavior (Healthy Campus 2010, 2009).

The shifting student body

The traditional health issues have always largely occurred as a result of a large number of new young students working and living closely together. These health concerns have increased over the past 10 years as the number of students have dramatically increased. According to the National Center of Education Statistics, college enrollment increased from 14.5 million students to 18.2 million students since 1997 (National Center For Education Statistics, 2009).

Change in student demographics 2000-2008

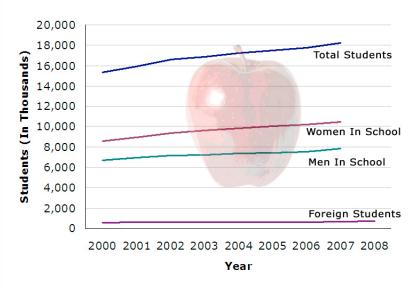


Fig. 1. Data taken from National Center For Education Statistics. (2008). *Fast Facts*. Retrieved on December 5, 2009, from http://nces.ed.gov/fastFacts/display.

In addition to an increase in students, the demographics of colleges have also changed. During the period from 1997 to 2007, the number of older people enrolled in college have increased and this number is expected to continue to grow. During this period, the number of students over the age of 25 increased by 13 percent and is expected to rise 19 percent more by 2017. This will bring a new set of health issues that do not normally affect the under 25-year-old students (National Center For Education Statistics, 2009).

An increase in women enrolled in college also brings up new issues for health care professionals to deal with. The U.S. Census Bureau reports that since 1970, the number of women in college has risen so they now make up 54 percent of all college students (Mather & Adams, 2007). This has an impact on both the types of illnesses treated by college health care professionals, for example eating disorders, and sexual behavior of the male and female college populations.

To further complicate the job of campus health providers, the total number of foreign students has risen in United States' higher learning institutions. In 2008 and 2009, the number of foreign students reached 671,616. This is a 7.7 percent increase from the previous year (Open Doors, 2009). Health professionals on college campuses increasingly have to deal with issues that are unfamiliar to them and fellow students are exposed to viruses and illnesses that they lack immunity from (Grace, p.247).

Illness and disease

The most immediate concern for college health professionals is the spread of infectious diseases. The flu, colds, strep throat and more serious illnesses such as meningitis and tuberculosis can spread rapidly through a crowded and active college campus. One recent example of this is the recent outbreak of the H1N1 virus, more commonly called "Swine Flu." Although numbers are still fresh and constantly being updated, the American College Health Association (ACHA) has tracked the virus on 243 college campuses around the United States. During the week ending October 30, 2009, the ACHA reported 9,319 cases on the 243 schools participating in their survey (*ILI last week*, 2009). The outbreak has since declined, but this is a good example how these viruses can spread rapidly throughout a college campus.

The ACHA recommends vaccinations for students living in student housing for diseases such as meningitis (*Meningitis*, 2009) and most campuses require vaccination records. This may help to prevent most cases of these preventable diseases and protect those students who risk being exposed to disease. For example, each year college campuses see from 100 to 150 cases of meningitis. The ACHA estimates that up to 80 percent of these cases could have been prevented by vaccination (*Meningitis*, 2009). Many schools are providing vaccines for seasonal illnesses such as the flu. The H1N1 virus also provides a good example of this. The ACHA has also tracked the colleges giving the H1N1 vaccine. For the week ending November 30, 2009, an estimated 143,045 students had received vaccines for the H1N1 virus (*ILI last week*, 2009).

The ACHA recommends the following vaccinations for college students (2009):

- Measles, Mumps, Rubella
- Polio
- Varicella
- Tetanus, Diphtheria, Pertussis
- Quadrivalent Human Papillomavirus Vaccine (HPV)
- Hepatitis A Vaccine
- Hepatitis B Vaccine
- Meningococcal Tetravalent (A,C,Y,W-135)
- Influenza
- Pneumococcal Polysaccharide Vaccine-23 valent

Many campuses are also attempting to implement screening programs to combat communicable diseases. The ACHA, for example, recommends screening all international students for diseases such as tuberculosis (Grace, 1997, p. 250).

Alcohol, tobacco and drugs

Many other health issues for college students are due to their behavior rather than their exposure to an unhealthy environment. The use of alcohol, tobacco and other drugs is one of the health issues that relates directly to students' behavior. According to the National Center on Addiction and Substance Abuse (CASA) at

Columbia University, almost half of full-time college students in 2007 abused drugs or drank alcohol in binges at least once a month (Leinwand, 2007). The CASA study also found that the rate of addiction to drugs and alcohol by students is far greater than the general public. Of all people 12 years old and over only 8.5 percent meet the medical definition of drug or alcohol abuse while 22.9 percent of college students meet the definition of abuse (Leinwand, 2007).

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Even without meeting the standard of abuse, alcohol and drug consumption among college students remains a concern. Tobacco and drug use had much smaller percentages of use. However, the use of these substances also is a concern. In the most recent survey by the ACHA, 63.1 percent of students reported that they had consumed alcohol within the previous 30 days and 4 percent claimed alcohol consumption had hurt their academic performance (2009, p. 9). Drug and alcohol abuse can also harm students' well-being in other ways. In the ACHA survey, students reported the following negative results to drinking alcohol or taking drugs (2009, p. 9):

- 33.7 percent did something they later regretted.
- 4.5 percent got in trouble with the police.
- 2 percent had sex without their consent.
- 15.4 percent physically injured themselves.
- 1.6 percent seriously considered suicide

Colleges and Universities are now looking at these mental and emotional side-effects of binge drinking and drug abuse as central to the well-being on campus and a serious effort is being made to educate students about these consequences.

Sexual issues

Sexual behavior is another concern for college health professionals. Newfound freedom, new exposure to other students and loss of inhibition due to drinking lead to an increase in unprotected sex, sexually transmitted diseases and sexual assault among college students. The 2008 survey conducted by the ACHA shows that college students are using this new freedom and engaging in risky sexual behavior. During a 12-month period, 66.3 percent of college students surveyed had one or more sexual partners (2009, p.10).

College-aged people fall into the most at-risk category for sexually transmitted diseases. According to the Centers for Disease Control (CDC), 15- to 24-year-olds account for nearly half of all new STDs each year even though they only represent one-fourth of the sexually active population (*STDs*, 2009). Gonorrhea, Chlamydia, Syphillis, Herpes, Hepatitis B, and the Human Papilloma Virus are the most common of the STDs on college campuses. College students also expose themselves by not using condoms when engaging in sexual activity. In the ACHA survey, only 53.5 percent of the students surveyed reported using a condom during intercourse (2009, p.10). This could lead to STDs or unwanted pregnancies for the 46.5 percent that did not wear condoms. This is a major concern for college health care professionals.

The large increase in women at colleges and universities has also added other worries. Since there are a large number of women at these institutions, they have become a target for sexual predators and sexual assaults. A 2000 report by Bonnie S. Fisher, Francis T. Cullen and Michael G. Turner looked at incidents of sexual victimization on college campuses. They estimate that for every 10,000 female students there could be more than 350 rapes a year (p.iii).

Nutrition and obesity

Students who are on their own for the first time often contribute to health problems by missing meals, eating too much of the wrong kind of food or skipping exercise. This leads to obesity, malnutrition and other diseases from a sedentary lifestyle. Health care providers at colleges attempt to encourage students to eat and exercise properly, however the ACHA survey shows that this is not always the case (2009, p.12).

The ACHA found:

- 60.2 percent of students reported only eating 1 to 2 servings of vegetables a day.
- 6.4 percent reported eating 0 servings of vegetables a day.
- 24.2 percent of students do not participate in even moderately intense cardio or aerobic exercise.
- 45.9 percent of students did not meet recommended guidelines for exercise.

The survey also found that 31.3 percent of students rated overweight or obese according to their Body Mass Index, used to measure body fat (2009, p.13). These bad health habits can lead to other health issues and are of concern to campus health professionals.

Mental health and stress

Health professionals have become increasingly aware of the mental health of college students. College is a time of high stress, high emotions and sometimes loneliness. Many students are on their own and away from family and friends for the first time. This can lead to adjustment problems. Students can be treated for depression, eating disorders and insomnia among many other mental health problems.

The ACHA survey also looked into the mental health of students on college campuses (2009, p.13). Some of their findings were:

- 87.4 percent of students claimed to feel overwhelmed in last 12 months.
- 47 percent of students felt things were hopeless at times.
- 81.9 percent claimed to feel exhausted, but not from physical exertion.
- 30.6 percent at times felt it was too difficult to function.

The survey also found that the treatment that students have received reflected some of these problems. In the past year, the most common mental issues that were treated were depression, anxiety, panic attacks and insomnia (2009, p. 14).

Complete wellness

As a result of the increase in students and an increased awareness of the many problems facing students and health care providers, many colleges are looking toward a more well-rounded complex approach to college health issues. The term they are using now is "Wellness." Ted Grace (1997, p. 255) explains the term.

Wellness includes many components other than having a physically fit body. It also includes self-

esteem and a positive outlook, a sense of purpose, a strong concern for others, a respect for the environment, a balanced and integrated lifestyle, freedom from addictions of a negative nature, and a capacity to cope with what life presents as the individual continues to learn.

The ACHA is attempting to provide a plan to meet these needs with their *Healthy Campus 2010* program. The organization lists its leading healthy lifestyle indicators (*Healthy Campus 2010*, 2009).

They are:

- Physical Activity
- Overweight and Obesity
- Tobacco Use
- Substance Abuse
- Responsible Sexual Behavior
- Mental Health
- Injury and Violence
- Environmental Quality
- Immunization
- Access to Health Care

By using the information they have gathered in their college surveys, the ACHA is attempting to offer planning guidelines to help college campuses meet all of their students' health needs. They attempt to create a network for colleges to exchange data and ideas, gather information and to create a model for other schools to educate and inform students about the risks to their health while attending college (*Healthy Campus 2020*, 2009). This comprehensive

The term wellness became popular because it emphasized the concept that health is not merely the absence of illness, but is the opposite of it.

(Grace, 1997, p.255)

approach toward wellness should address concerns of both the student and the college.

Conclusion

The days when a nutritional diet and a focus on treating the flu and coughs on college campuses are a thing of the past. Increased student enrollment, a larger, more diverse student population and increased awareness of other pitfalls of student life has expanded the focus of college health workers. A new emphasis on education and prevention, as well as a concern over mental and emotional health has sliced the apple that used to keep the doctor away into many pieces.

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Mental Health

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