

The Pharmacists Role In Screening for Men's Health

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Preventing disease is more effective than treating it. All stakeholders benefit and it costs less. As healthcare professionals, pharmacists have a duty to screen for disease and high-risk health problems in their patients. Pharmacists have a greater opportunity to screen for risks than other healthcare professionals, due to their frequency of exposure to patients. In addition, pharmacists have many tools to offer patients for monitoring their own health care risks.

The Risks

"There is a silent health crisis in America... it's the fact that, on average, American men live sicker and die younger than American women." (Dr. David Gremillion, Men's Health Network) (1)

The life expectancy for all males at birth (2001) is 74.4 years, while females can expect to live 79.8 years. This spread has increased over the years. For example, in 1920, women lived, on average, only one year longer than men. The causes are many, but generally, today, men have higher rates of death from the top 10 causes. Additionally, they are the victims of over 92% of workplace deaths. The primary causes of death in men are heart disease, cancer, injuries, stroke, AIDS and suicide. (2)

The Men's Health Network recognizes six reasons why men are at high risk: (3)

- 0 A higher percentage of men have no healthcare coverage
- 0 Men make only 50% as many prevention physician visits
- 0 Men are employed in many of the most dangerous occupations, e.g., mining, fire fighting, construction, and fishing
- 0 Society and cultural preferences discourage healthy behaviors in men and boys
- 0 Research on male-specific diseases is currently under funded
- 0 Men may have less healthy lifestyles including high risk-taking behaviors at younger ages

Specific Health Threats for Men

Among all health threats for men, what are the most serious and life threatening? The Mayo Clinic cites the following major health threats for men. (4)

No.1 - Heart disease

In 2000, heart disease was responsible for 345,000 deaths in men in the US. For every 100,000 men, 167 die of heart disease. Twice as many men die of heart disease than women. Age-adjusted rates of ischemic heart disease in US men were 109/100,000 men versus 56/100,000 women. (5)

No.2 - Cancer

In 2000, cancer killed 286,000 men in the US. The most common

cause of cancer death in men is lung cancer, and 90% are related to cigarette smoking. Prostate cancer is the second-leading cause of cancer deaths in men. The American Cancer Society estimates that 189,000 men were diagnosed with prostate cancer in 2002.

Colorectal cancer (CRC) is the second leading cause of cancer related deaths in the US for both men and women. About 56,300 Americans died of CRC in 2000 and 93% are diagnosed in people aged 50 or older. Notably, more than a third of cases can be avoided with regular annual screening by fecal occult blood tests (FOBT), flexible sigmoidoscopy every 5 years, or total colonic exams with colonoscopy every 10 years. (6)

No.3 - Stroke

Stroke killed nearly 65,000 men in the US in 2000, and was also a leading cause of disability in the US. While certain risk factors (such as high blood pressure, smoking, inactivity, and high fat diets) are controllable, others (family history, age, sex, race) can't be controlled. Screening should include questions relating to non-controllable risk factors to ensure that these patients are monitored more frequently at advanced ages.

No.4 - Accidents (unintentional injuries)

Accidents killed about 64,000 men in the US in 2000. The leading cause was motor vehicular crashes (28,352 deaths), followed by poisoning (9,000 deaths). Motor vehicular crashes were particularly more dangerous for men than women as twice as many men died . 28,352 men versus 13,642 women.

No.5 - Chronic obstructive pulmonary disease (COPD) - includes emphysema and chronic bronchitis

COPD is the number one cause of cancer death in men, and is strongly associated with lung cancer. The main cause of COPD is smoking. About 60,000 men died of CO PD in 2000 in the US. Smokers are 10 times more likely to die of COPD than nonsmokers.

No.6 - Diabetes

In 2000, about 70,000 people died of diabetes and 32,000 of them were men. Of equal concern is that there are approximately 17 million people in the US with diabetes, but 6 million don't know that they have it. People with diabetes are two to four times more likely to have heart disease and suffer from strokes.

No.7 - Pneumonia and influenza

In 2000, almost 29,000 men died of influenza and pneumonia. Men with COPD, asthma, heart disease, diabetes and suppressed immune systems are at high risk for death from pneumonia and influenza. Smoking increases risk as well. Influenza risk is reduced by yearly

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immunizations that can be 90% effective in preventing influenza. Pneumonia risk is reduced by 60% to 70% with immunizations.

No.8 - Suicide

In 2000, about 24,000 US men committed suicide. The highest rate is in men aged 65 and older. Almost all are suffering from depression. (7) Men commit suicide 4 times more frequently than women, and use deadlier means, e.g., guns, when they attempt suicide. Screening signs for suicide are:

- . Moodiness
- . Life crisis
- . Feelings of worthlessness
- . Alcohol or drug abuse
- . Thoughts or comments about ending one's life
- . Social withdrawal
- . Depression

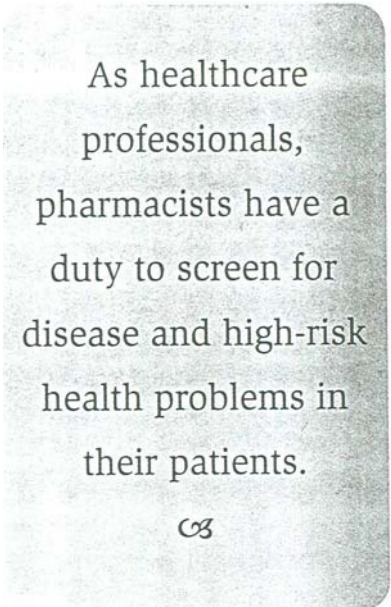
No.9 - Kidney disease

In 2000, nearly 18,000 men died of kidney disease. More than 378,000 Americans with kidney disease need dialysis or a transplant. The National Kidney Foundation cites that 20 million Americans have chronic kidney disease and another 20 million are at increased risk. (8)

No. 10 - Chronic liver disease and cirrhosis

In 2000, about 17,000 men in the US died of chronic liver disease and cirrhosis. The American Liver Foundation cites alcoholic liver disease and chronic hepatitis C as the leading causes of cirrhosis. Approximately 300,000 people in the US are hospitalized yearly with cirrhosis. (9) The causes for liver disease are hepatitis, alcoholism and certain inherited diseases. Excessive drinking causes fatty liver that can lead to liver disease, cirrhosis and liver failure. Cirrhosis is a scarring of liver tissue

that is serious and irreversible. If the condition reaches liver failure, the most effective treatment is a liver transplant.



Screen	Frequency	Risk Factor
Blood pressure	Every 2 years	
Cholesterol	Every 5 years starting at age 35	Smoker, diabetes, family history of heart disease start at age 20
Colorectal cancer (CRC)	Regularly after age 50. See notation in article on following pages.	At least 75% of CRC occurs in people with no family history and no risk factors
Depression	If patient feels down, sad, hopeless, or little pressure or interest in doing things for 2 weeks straight, recommend a visit to their physician.	
Diabetes	Routine screen	High cholesterol or high blood pressure
Hearing tests	Every decade through age 50 and every 3 years thereafter (Am Speech-Language-Hearing Assoc.)	
Prostate cancer	Prostate specific antigen (PSA) or digital rectal exam (DRE) at age 50 or older (Am. Cancer Society)	Earlier screening recommended for blacks and patients with a family history of prostate cancer.
Sexually transmitted disease or HIV	Patient initiated subject	
Testicular examination	Self-exam monthly starting in the mid-teenage years. (www.mayoclinic.com)	Multiple sex partners, male sex with males, injection users and their sex partners
Vision tests	Once between 20 and 39 years of age, every 2-4 years between 40 and 64 years, and every 1-2 years after 65. (Am Acad of Opthamology)	
Weight (includes height, weight, waist measurements, and body mass index)	Every 2 years after age 20 (Am. Heart Assoc.)	Diabetes, high blood pressure, etc.



A Screening Checklist

What preventative screens should pharmacists recommend? A checklist for screening and recommendations for preventative measures is available from the US Department of Health and Human Services, Agency for Healthcare Research and Quality, www.ahrq.gov. (10) A screening checklist includes tests, prophylactic medications, and healthy lifestyles.

Medicines to Prevent Disease

In addition to screening questions, certain preventative medicines should be recommended.

Aspirin

Prevents heart disease after age 40. Consider before age 40 if high blood pressure, high cholesterol, diabetes, or a smoker. The American College of Chest Physicians recommends 82mg every day, while the ACC/ AHA recommends 160-325mg every day. Patients at risk for bleeding and taking anticoagulants, e.g., Warfarin, should not start aspirin until the course of Warfarin is completed.

Immunizations

- 0 Flu shot every year starting at age 50
 - 0 Tetanus-diphtheria every 10 years
 - 0 Pneumonia shot once at age 65 (possibly earlier if lung disease)
- Hepatitis B in individuals at high risk (e.g., health care workers, custodial staff, health care students, patients requiring blood transfusions, staff in hemodialysis or hematology/ oncology units, patients with chronic hepatitis C infection, patients/ staff in mentally handicapped and non-institutionalized settings, sexually active homosexual men)

Healthy Activities

Finally, healthy lifestyles should also be recommended as part of the prevention screen.

1. Smoking cessation
2. Healthy diets: less saturated fat and cholesterol
3. Physical activity: 20-30 minutes every day
4. Maintain healthy weight: BMI <= 25
5. Alcohol in moderation: no more than 2 drinks per day (A standard drink is one 12 ounce bottle of beer or wine cooler, one 5 ounce glass of wine, or 1.5 ounces of 80 proof distilled spirits.)

Conclusion

Screening for health risks in men is a crucial function for all members of the healthcare profession. The benefits are improved quality and length of life for a majority of men. Pharmacists are uniquely positioned to assist in the screening for disease. Pharmacists should be recommending preventative screens for all applicable patients. In addition, preventive medicines, immunizations, and healthy lifestyle recommendations should become a component of all patient education. Screening provides both a professional service and a business case for tests and prophylactic medications. Best of all, everyone benefits.

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References

1. <http://www.menshealthnetwork.org/library/menshealthfacts.pdf>
2. National Vital Statistics Report, Vol. 51, No.5, March 14, 2003. Deaths: Preliminary Data for 2001, page 25.
3. Ibid, 1
4. www.mayoclinic.com
5. Ibid, 1
6. www.cdc.gov/cancerScreenforLife; National Cancer Institute (NCI) Information Service
7. National Center for Injury Prevention and Control, Suicide: Fact Sheet. www.cdc.gov/ncepc/factsheets/suifacts.htm
8. National Kidney Foundation, Are You At Increased Risk for Chronic Kidney Disease? www.kidney.org/atoz/pdf/atriskcd.pdf
9. American Liver Foundation, Hepatitis and Liver Disease in the United States. www.liverfoundation.org/db/articles/1008
10. U.S. Department of Health and Human Services Agency for Healthcare Research and quality, www.ahrq.gov. AHRQPub. No. APPIP 03-0011, Revised February 2004.

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