VIEWPOINTS

Importance of Alcohol Awareness and Issues in Curricula

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Submitted August 14, 2012; accepted August 14, 2012; published November 12, 2012.

The public health aspects of the problems associated with alcohol use and abuse are exploding in quantity and intensity in the United States. Alcohol abuse has devastated many lives and significantly harmed many patients and families. Abuse of the social drug alcohol has long-term consequences for all aspects of our society. This editorial is not directed at moderate consumption of alcohol in a reasonable manner, but rather at the negative effects of alcohol abuse and misuse and the significant public health role pharmacists and those in academia must fulfill.

Pharmacists, faculty members, and students need to embrace a much more prominent public health role in addressing this significant health issue impacting so many. The importance and cruciality of alcohol and alcohol-related issues are underappreciated and not included to the extent that they should be in pharmacy curricula or in patient care provided by pharmacists in the United States.

The devastating consequences of inappropriate or excessive alcohol consumption are widely known. These conjoining aspects of the negative aspects of alcohol use and need for intervention are significant segments of the practice of pharmacy, medicine, nursing, allied health, social work, and other helping professions.

Specific examples of the importance of alcohol misuse and abuse related to pharmacy include the following:

- Alcohol use during pregnancy can be disastrous, with fetal alcohol spectrum disorders still being the largest known cause of intellectual disability in children.
- Six percent of deaths in the population aged 65 years and older die from strokes.¹ Alcohol use and misuse play an important role in patients' susceptibility to strokes.
- Five percent of deaths in the US population over age 65 years are from Alzheimer's disease.¹

Alcohol use and misuse play an important role in Alzheimer's disease.

- Of the US population between 45 and 64 years of ages, chronic liver disease and cirrhosis account for 4% of deaths.¹ Excessive alcohol use is an important risk factor for these diseases.
- The consumption of alcohol with aspirin contain products or nonprescription or prescription non-steroidal anti-inflammatory drugs can lead to significant problems of gastrointestinal bleeding and life-threatening sequelae.
- Consumption of alcohol with acetaminophen in excessive doses of either can lead to acute liver failure.
- Many other drugs are adversely affected by the synergistic interactions of alcohol and prescription medications. Narcotic and nonnarcotic analgesics, antidepressants, and neuroleptic medications are all significantly influenced, with enhanced effects, by concomitant alcohol consumption. Wesson and colleagues² more than a decade ago noted that: "Without question, the toxicity of many prescription psychotropic drugs does not exceed that of alcohol."^{2, p.14} One of the most common questions asked of pharmacists in community pharmacy settings by patients is: "Can I take this drug with beer, wine, liquor, etc.?"

A research study of all pharmacists registered in Indiana that was follow-up research to a study conducted 7 years earlier, found that pharmacists who saw the impact of alcohol on patient morbidity were more likely to become involved in counseling and intervening with patients about the impact of alcohol upon their health and well being.³

Why are pharmacies in the beer, wine, and liquor business? There is no reasonable answer to this question. Of the 60,000 community pharmacies in the United States, roughly 70% are either chain pharmacies or are contained in the footprint of chain and/or big-box store pharmacies. Virtually every chain pharmacy sells beer and/or wine in their stores, and many sell liquor as well.

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Several chains that extol enhanced and state-of-the-art pharmacy care services continue to sell wine, beer, and liquor. It is this author's view that the selling of liquor, wine, and/or beer has no place in a community pharmacy ever for any reason.

According to the US Centers for Disease Control and Prevention, there are approximately 85,000 deaths attributable to excessive alcohol use each year in the United States.⁴ Comparative statistics indicate that excessive alcohol use is the third-leading lifestyle-related cause of death for the US population.⁵ Also, abusive alcohol use is responsible for 2.3 million years of potential life lost per year, or placing in another context, an average of about 30 years of potential life lost for each death.⁶ During the year 2005, more than 1.6 million hospitalizations and more than 4 million emergency room visits were related to alcohol consumption.⁷

The Dietary Guidelines for Americans note that adults who drink alcoholic beverages should do so in moderation, which is defined as no more than 1 drink per day for women and no more than 2 drinks per day for men.⁸ However, there are some persons who should not drink any alcohol, including:

- Women who are pregnant or trying to become pregnant.
- Patients taking prescription or nonprescription medications that may cause harmful reactions when mixed with alcohol.
- Individuals younger than 21 years of age.
- Those who are recovering from alcoholism or are unable to control the amount they drink.
- Individuals suffering from a medical condition that may be worsened by alcohol.
- Anyone driving a vehicle, planning to drive, or participating in other activities requiring skill, coordination, and alertness.

What can we learn from our international colleagues? This unresolved public health opportunity is not confined to the United States alone. In a complete assessment of pharmacist involvement in alcohol screening and brief interventions (SBI) in the community pharmacy setting, Sheridan and colleagues⁹ in New Zealand, found there was great potential for pharmacist involvement in SBI for problem drinkers. They noted that education, advocacy, and intervention, all in the name of providing enhanced public health efforts, could provide a much-needed advocacy and focused service for patients.

Glasgow in the United Kingdom has the highest incidence of liver diseases secondary to alcohol abuse in all of Scotland; in fact in some areas of the city, alcohol abuse is responsible for more mortality than heart attacks and

lung cancer put together.¹⁰ In a comprehensive educational and outcome assessment with Glasgow community pharmacists trained to intervene with patients with alcohol abuse issues, Fitzgerald and colleagues¹¹ found their methods and assessment resulted in a project that was successful in training community pharmacists from 6 community pharmacies to discuss alcohol issues and needs for help with alcohol abuse with 70 clients.

The proactive inclusion of public health-oriented components dealing with alcohol use and abuse are most worthy of deserving much-increased inclusion or enhancement by devoting many more associated segments within our curricula and specific courses. Pharmacy students must see their future public health efforts of education and intervention with patients dealing with alcohol use and abuse as a crucial aspect of their future practice, regardless of where their practice may be. Finally, those in charge of pharmacies at the corporate or district level need to be strong, vocal, and persistent advocates for pharmacies to get out of the business of selling liquor products in any form within their pharmacies or store footprints.

In a paper published in the *Journal of the American Medical Association*,¹² Katz suggested that pharmacies sell other damaging substances deleteriously affecting the general health of the US population, specifically noting that the sale of tobacco, cigarettes, and other items is a "slippery slope." Katz asks: "What about the sale of alcohol in pharmacies?" Dr. Katz eloquently makes the case that pharmacies should not sell either tobacco products or alcohol, and that to continue to sell them is an inherent ethical conflict that cannot be reasonably explained away, based solely on profit, etc.

Item VII of the American Pharmacists Association's *Code of Ethics for Pharmacists* states: "A pharmacist serves individual, community, and societal needs."¹³ This author cannot see how selling alcohol products in a pharmacy is a qualifier for this or any other segment of our professional ethos. We are expected as pharmacists to enact and support change in our profession. The fifth sentence of our *Pharmacists Oath* is: "I will embrace and advocate change in the profession of pharmacy that improves patient care." A positive change for all of us would be to support exclusion of liquor sales in pharmacies. We all need to significantly improve our public health efforts impacting societal alcohol use and misuse through much more vigorous and sustained efforts to make needed changes a common public health goal for our profession.

REFERENCES

1. Miniño AM, Murphy SL. Deaths in the United States, 2010. US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics.

2. Wesson DR, Smith DE. Prescription drug abuse – patient, physician, and cultural responsibilities. *West J Med.* 1990; 152(5):613-616.
3. Kotecki JR. Sale of alcohol in pharmacies: results and implications of an empirical study. *J Community Health.* 2003;28(1):65-77.
4. CDC. Division of Population Health, National Center for Chronic Disease Prevention and Health Promotion Centers for Disease Control and Prevention. <http://www.cdc.gov/NCCDPHP/dph/publications.htm> Accessed October 19, 2012.
5. Mokdad AH, Marks JS, Stroup DF, Gerberding JL. Actual causes of death in the United States, 2000. *JAMA.* 2004;291(10): 1238-1245.
6. Chen CM, Yi H. *Trends in Alcohol-Related Morbidity Among Short-Stay Community Hospital Discharges, United States, 1979–2005.* Bethesda, MD: National Institutes of Health, National Institute on Alcohol Abuse and Alcoholism. NIAAA Surveillance Report #80; 2007.
7. McCaig LF, Burt CW. *National Hospital Ambulatory Medical Care Survey: 2003 Advance Data from Vital and Health Statistics; No 358.* Hyattsville, Maryland: National Center for Health Statistics; 2005.
8. United States Department of Agriculture and United States Department of Health and Human Services. *Alcoholic Beverages.* In: Dietary Guidelines for Americans. Washington, DC: US Government Printing Office; 2005: p.43-46.
9. Sheridan J, Wheeler A, Chen, LJ H, Huang AC-Y, Leung IN-Y, Tien KY-C. Screening and brief interventions for alcohol: attitudes, knowledge and experience of community pharmacists in Auckland, New Zealand. *Drug Alcohol Rev.* 2008;27(4): 380-387.
10. Blair D. Glasgow: a city with problems. <http://www.glasgoweastlibdems.org.uk>. Accessed August 14, 2012.
11. Fitzgerald N, McCaig DJ, Watson H, Thomson D, Stewart DC. Development, implementation and evaluation of a pilot project to deliver interventions on alcohol issues in community pharmacies. *Int J Pharm* CDC. Division of Population Health CDC. Division of Population Health *Pract.* 2008;16(1):17–22.
12. Katz MH. Banning tobacco sales in pharmacies, the right prescription. *JAMA.* 2008;300(12):1451-1453.
13. American Pharmacists Association. *Code of Ethics for Pharmacists.* <http://www.pharmacist.com/code-ethics>. November 5, 2012.