every high thing that exalteth itself against the knowledge of God, and bringing into captivity every thought to the obedience of Christ."

Lastly, pride is a common temptation faced by those in privileged positions. Pharmacists may encounter prideful thoughts when working with pharmacy technicians, other healthcare professionals, or even the patients we vow to serve. As my pastor always said, "You can't spell pride without 'I' in the middle." A focus on our skills, our abilities, or our particular authority can quickly undermine the compassion we need to perform our job with excellence. This may lead us to devalue others around us for any number of reasons, despite the fact that they have equal standing with us before God. Ultimately, this pride may lead to a lack of collaboration with our peers in the field, negatively impacting patient care. Though we have an expertise in medication therapy, our prayer ought to be to approach each situation humbly, seeking what we can learn from others around us. Proverbs 16:18 KJV lends the ominous reminder that *"pride goeth before destruction…"* and pride can easily fuel struggles with either the lust of the eyes or the lust of the flesh.

In conclusion, there is a very practical truth for Christian pharmacists found in the wisdom of Deuteronomy. As pharmacists, we need to be wary of "money, horses, and spouses" as each of these categories apply in our individual walk with the Lord. We must strive for sanctification: turning away from the lust of the flesh, the lust of the eyes, and the pride of life, and turning toward our loving Father. These issues apply to pharmacists, because we should not be separating our job from our faith. When we go into our workplaces, we represent our Savior in all our interactions. Thankfully, we serve a God Who often uses parables and illustrations to help us relate to and remember these truths each day.

References:

1. Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Pharmacists, on the Internet at https://www.bls.gov/ooh/healthcare/pharmacists.htm (accessed July 12, 2020).

2. Baldisseri MR. Impaired healthcare professional. Crit Care Med. 2007;35(2 Suppl):S106-16.

3. Merlo LJ, Cummings SM, & Cottler LB. Recovering substance impaired pharmacists' views regarding occupational risk for addiction. J Am Pharm Assoc. 2012;52(4):480–91.

4. Kleber HD, Weiss RD, Anton RF, et al. Treatment of patients with substance use disorders, second edition. American Psychiatric Association. Am J Psychiatry. 2007;164(4 Suppl):5-123.

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Morality and Ethics versus Profit: Health Fraud and the Christian Pharmacist

By Virgil Van Dusen, John R. Barnett, and W. Steven Pray

Introduction

The book of Mark poses a question relevant to community pharmacy. Mark 8:36 (KJV) asks "For what shall it profit a man, if he shall gain the whole world, and lose his own soul?" Should the community pharmacist pursue profit when it means sacrificing one's morals and ethics? Pharmacists are often forced to make these moral choices, especially when counseling patients on self-care.[1] The reason for this dilemma is that pharmacy shelves are filled with highly profitable nonprescription products of unknown efficacy and safety.[2] They include herbs, "dietary supplements," homeopathic products, and "essential" oils. It would seem to be unethical and immoral to sell these products to a patient with a medical condition when that product lacks evidence that it will safely treat the condition, even though that sale would result in a profit to the pharmacy.[3,4]

Why are fraudulent nonprescription products allowed?

Nonprescription product ingredients fall into two broad

groups. One group has been proven safe and effective through the longstanding and thorough mechanism known as the FDA OTC Review.[5] Each ingredient approved through this process has supporting research of high quality that meets all of the standards of evidence-based medicine. Pharmacists can morally and ethically recommend products containing these ingredients for the conditions on their labels, while pointing out their doses, use directions, precautions, drug interactions, and warnings.

Morality and ethical issues arise with a second group of nonprescription ingredients, those lacking proof of safety and/or efficacy. Safety and efficacy should be inextricably intertwined in nonprescription product ingredients. Safety without efficacy is a placebo. Efficacy without safety presents unjustifiable risk. Products lacking proven safety and efficacy meet FDA's legal definition of "health fraud."[6,7] These unproven products were once referred to as "quackery," but in recent years this term has fallen into disfavor.[7,8] Their widespread acceptance and mushrooming sales have caused the industry to give them more favorable names, such as "alternative medicine," or "natural medicine."[9,10] Nevertheless, they have no FDA-approved use; the FDA cannot legally require sellers to prove their safety or efficacy prior to marketing.

Sales of many fraudulent products are legally allowed in the United States due to a 1994 law known as the Dietary Supplement Health and Education Act (DSHEA).[11] The term "dietary supplements" as defined in DSHEA does not refer to vitamins and minerals that are scientifically proven to prevent and treat medically recognized deficiency diseases (e.g., scurvy, beriberi, pellagra). Rather, the legal term "dietary supplements" encompasses a host of fraudulent products such as herbs and non-herbal ingredients (e.g., apple cider vinegar, bioflavonoids, bee pollen, collagen, colloidal silver).

Another group of fraudulent products legally allowed for sale in the United States is homeopathic remedies. No homeopathic product has ever been proven safe or effective for any medical condition, despite their widespread use.[11]

In other cases, fraudulent products are available because the FDA, as it admits, lacks the resources to remove them from the market.[6] This group includes "essential oils" and ear candles.

What is ethics?

Ethics is the systematic study of what is right and good with respect to conduct and character. Ethics attempts to answer two fundamental questions: What should we do and why should we do it? The answers to these questions are intended to guide us in our personal and professional decision making.

The first basic ethical principle is the expectation of respect for persons. People should be treated as autonomous individuals, and those with diminished autonomy are entitled to protection.

The second basic ethical principle is "beneficence." Beneficence refers to the goal of protecting the well-being of an individual. In its most simple form, this is often summarized as "Do No Harm." This guideline also encompasses the obligation to maximize possible benefits to patients while minimizing harm.

The final basic ethical principle is ensuring "justice." This concept of justice is typically interpreted as an evaluation of "fairness of distribution" regarding both the potential benefits and the potential burdens.

Guidance in ethics for community pharmacists

The ultimate goal of the ethical principles is to guide people in making justifiable decisions. The decisions are based on a variety of ethical standards, including religious texts, natural laws, reason, intuition, personal experiences, codes, or governmental decrees. Professions such as pharmacy have also developed ethical codes to provide direction for ethical decision-making. Codes of ethics and laws require pharmacists to help individuals achieve optimum benefit from their medications while maintaining the patient's trust. Pharmacists are required to convey information. Providing factual information about prescription and nonprescription medications fulfills the obligation of the pharmacist to achieve optimum patient benefit. At the present time, there are no federal or state laws that prohibit sales of unproven nonprescription products. Further, the only code of ethics for pharmacy is a product of the American Pharmacists Association, but it does not prohibit pharmacists from selling unproven products.[12] The absence of professional ethical guidelines or laws regarding unproven products leaves pharmacists in an ethical quandary regarding the three basic principles of ethics described above.

Ethical dilemmas regarding unproven nonprescription products

The principle of respect for patients seems self-explanatory. However, examining the ramifications of this underlying ethical concept raises many complex issues. How one pharmacist interprets the principle may be in direct conflict with another pharmacist's interpretation of the same principle. Is it better to respect a patient's own decision to purchase unproven products, or is it more ethical to provide information that would deter the sale? Some pharmacists indicate that if they do not sell unproven products, patients will purchase them elsewhere.[13] This rationalization seems to be ethical, in that it treats patients as autonomous agents who can make their own decisions. However, this principle also recognizes that some people have diminished autonomy and are therefore entitled to the protective intervention of a pharmacist. When would a community pharmacy patient not be fully capable of making their own self-care

decisions? Immature and incapacitated patients have diminished ability to understand the intricacies of self-care and should be protected. A leading ethical reference often cited as a guide for developing professional codes of conduct, the Belmont Report, has greater implications for community pharmacists in extending the requirement to protect patients.[14] This arises from the recognition that respecting a patient's autonomy assumes that he/she has all of the necessary information to make a medically wise self-care decision. If the patient does not have all of the requisite information to make that decision, either due to a lack of exposure to the information or perhaps also due to an inability to fully comprehend the information, pharmacists are ethically required to either make them fully aware of all the appropriate information, or prevent those patients from engaging in the potentially dangerous behavior.[14] Therefore, one could reasonably argue that as long as the pharmacist makes certain that everyone has been made fully aware of the lack of any evidence for the efficacy or safety of these products, the pharmacist could then sell those products to the individuals who still wish to purchase them. In other words, the patient who wishes to purchase an unproven product with full knowledge of its lack of efficacy and/or safety, contraindications, and drug interactions could justifiably be interpreted as having made an autonomous decision.

The ethical principle of beneficence, or "Do No Harm," should also be examined in regard to unproven products. The medical literature has many examples of unproven nonprescription products that have harmed patients, such as kava, St. John's wort, and lobelia. These are examples of what is known legally as "direct health hazards."[6,7] Unproven products can also endanger patients by presenting "indirect health hazards."[6,7] These occur when the patient purchases an unproven product in preference to products or therapies proven to be safe and effective and which may be lifesaving. As a result, the medical condition does not improve or worsens. If an unproven product is only indirectly harmful, a pharmacist might argue that the "Do No Harm" expectation of the ethical guidelines has been upheld. However, since the full expectation of beneficence clearly includes the obligation to maximize possible benefits and minimize possible harm, the pharmacist should also acknowledge that selling unproven products violates the ethical principle of beneficence.

The third ethical principle of justice or fairness of distribution poses additional ethical dilemmas. It could be argued that certain patients are more likely to purchase unproven products because of such life situations as lower education, restricted access to computer search engines, or adverse economic situations that favor purchase of cheaper unproven products. In these situations, the benefits of proven products are unfairly distributed to one group of patients, while the safety/efficacy risks associated with unproven products are unfairly distributed to another group of patients. This can be remedied at the point of sale if the pharmacist endeavors to educate all patients about the shortcomings of unproven products. If the pharmacist is satisfied that the patient has full knowledge of the consequences, he/she may be able to accept their decision to purchase an unproven product based on the concept of respecting personal autonomy. Even highly intelligent, financially sound patients who have been properly counseled by the pharmacist have the freedom to make a medically unwise decision to purchase a product of unknown safety and/or efficacy.

Ethics of omission

As mentioned above, in the U.S., there is no legal duty to counsel patients about nonprescription products. Proven and unproven nonprescription products are sold in gas stations, convenience stores, beauty shops, motels, and airport kiosks. Unless the cashiers are educated medical professionals, they have no professional ethical codes to guide their behavior.

By contrast, the community pharmacist is faced with the ethical conflict presented above, whether to be truthful or deceptive. The pharmacist may cope by intentionally neglecting any mention of the product's lack of proven efficacy and/or safety, an approach referred to as a "benevolent deception."[3]

One form of a benevolent deception is to present an affirmative statement which may appear to give credibility to the product such as "A lot of people use it and everyone seems pleased with the results." While such a response omits a full discussion of the product's shortcomings, in reality it also avoids revealing the deeper truth that it may not be effective or safe. By taking this approach, the pharmacist omits the truth for the sake of the sale, in preference to taking a higher road to full disclosure and absolute honesty. This approach creates a surreptitious dishonesty.

Ethical conflicts

A primary objective for pharmacists is to advance the healthcare needs of the people they serve. The goal should be to place the patient's interests ahead of their own. However, reaching this goal can cause ethical conflicts.

These ethical conflicts are rooted in a fundamental question surrounding community pharmacists. To all appearances, community pharmacies are a professional setting operating as a business.[15] This coexistence of business activities and professional obligations is not unique to pharmacy. However, one distinction is that many health professionals (e.g., physicians, nurses, dentists) only provide services, while community pharmacists also sell products, which provides the bulk of income for most community pharmacies. Increasing competition from large chain pharmacies, decreasing prescription reimbursements, and online pharmacies place the average community pharmacy in a financially precarious position. Nonprescription product income can

make a significant difference in pharmacy survival. Declining to sell unproven products on ethical grounds can endanger the life of the pharmacy. The need to survive could jeopardize the will to be ethical.

The psychology of providing unproven products

Selling unproven products with knowledge of their shortcomings can result in adverse psychological effects on pharmacists, as they examine their own level of honesty and degree of adherence to the ethics standards. Various psychological theorists have identified an innate human need for internal consistency or harmony. Piaget used the term "disequilibrium" to describe a situation when an individual's schema (or conception of reality) does not fit well with one's real life experiences.[16] Festinger coined the term "cognitive dissonance" to describe those situations when an individual recognizes that one belief is not consistent with another, or when there is inconsistency between one's beliefs and his or her behaviors.[17] In other words, an individual cannot simultaneously hold the belief the he or she is an honest and ethical person while purposefully engaging in perceived dishonest or unethical behavior. Such situations would lead to disequilibrium or cognitive dissonance. Since internal inconsistency cannot be maintained, the individual must attempt to resolve this conflict or reach an accommodation.[16,18]

One method of reducing this internal inconsistency would be for the community pharmacist to deny having any power over the decision to stock unproven products. If pharmacists are able to convince themselves that the decision to stock unproven products is made by nameless corporate executives who have no concern for the pharmacists' opinions, they may be able to relieve themselves of responsibility. This method of restoring internal consistency may deflect feelings of responsibility for potential patient harm. However, it is unlikely to alleviate an internal conflict about the negative effect on the public's trust of pharmacists.

Another method of minimizing internal conflict would be to avoid information that would cause the inconsistency. In other words, pharmacists would not feel a sense of conflict or dissonance if they never consciously analyze how selling unproven products may be dishonest or unethical. Maintaining psychological harmony through avoidance may be the most common defense mechanism since the pharmacist avoids feelings of responsibility for potential harm to the patient, as well as the profession.

Loss of consumer trust

If pharmacists sell unproven nonprescription products (for whatever reason), public trust in pharmacists may be adversely affected, much the same as a possible loss of confidence in the U.K.'s National Health Service if it funded homeopathy.[19] Former FDA Commissioner David Kessler, MD, JD, discussed pharmacy ethics after observing twenty-six separate product displays in a community pharmacy with unproven claims (e.g., "immune enhancer" and "memory support").[20*]

Another criticism of pharmacy ethics appeared on a website that critically analyzes and exposes pseudomedical practices that are not supported by sound scientific evidence of safety and efficacy. The physician/author wrote a sharp indictment of pharmacy ethics in a treatise entitled, "Unethical and Ignorant Behavior of Pharmacists."[21] The essay pinpointed sales of unproven products, asking "What Happened to Ethics?"** He quoted one source who answered that ethics were sacrificed to greed.

Homeopathic products have been discussed in this Journal.[22,23] A paper criticized pharmacists for selling them. The author concluded that pharmacists have three possible justifications for doing so: willful ignorance, blatant dishonesty, and/or overwhelming greed.[24]

In the face of these harsh criticisms of pharmacists who sell unproven products, the profession of pharmacy should consider the impact on consumer trust. The Gallup Polling Organization has long held an annual poll asking consumers to rate the honesty and ethical standards of various occupations. Pharmacists ranked first for many years. In the 2016 poll, pharmacists received the second highest ranking with 67% of those surveyed, ranking the honesty and ethical standards of pharmacists as "high" or "very high."[25] In the 2020 poll, pharmacists dropped to fourth place, with only 64% of respondents ranking pharmacists' honesty and ethical standards as "high" or "very high."[26] It is important to consider what might have lowered the public's perception of pharmacist's honesty and ethical standards. Selling unproven products might be part of the problem.

Options for pharmacists

The concerned pharmacist has several options. The most straightforward is refusal to sell all unproven products. If patients ask for them, the pharmacist can explain that they are not known to be safe or effective.

If the pharmacist has no control over products stocked in the pharmacy, such as in a chain store, it is more challenging to be honest. Should a patient ask about an unproven product, the pharmacist can exercise utmost honesty by explaining its lack of proven benefit and/or safety, and either refer the patient to a prescriber, or point out a safe and effective alternative.

The pharmacist can also exercise high ethical standards when the patient does not ask about the unproven product but attempts to purchase it without consulting the pharmacist. A comment such as this may be useful: "May I recommend another product that has scientific evidence that it works and it's safe?" Presented with this honest response, the patient may ask why the pharmacy offers products for sale that are not proven safe and effective. The honest answer is, "Because they are profitable." Of course,

being honest to this degree opens the ultimate question referred to above: Are pharmacists businessmen/businesswomen or professionals?

Another option for the honest pharmacist is to explain that although these products have not been proven safe or effective, they may still be safe and efficacious. In other words, absence of evidence is not the same as evidence of absence.

Refusing to stock unproven products or persuading patients not to purchase them is bad for business but is the honest pharmacist's professional duty. Selling unproven products may be a good business model, but it could be considered by some as ultimately dishonest, unethical, and unprofessional.

Conclusion

Unproven nonprescription products are ubiquitous and available in thousands of outlets, both with and without a pharmacist. Unproven products include "dietary supplements," herbals, non-herbal supplements, homeopathics, "essential" oils, and ear candles. As professionals, pharmacists have codes describing ethical behaviors. Selling unproven products to patients violates the basic precepts of moral and ethical behavior. Doing so can cause significant ethical conflict for the pharmacist and lower the public's perception of the honesty and ethical standards of pharmacy in general.

*Dr. Kessler provided valuable insight into pharmacy ethics from a physician's perspective: "These things are being sold—not in just specialty stores, these are being sold in chain drugstores. Where is the oversight? Don't these pharmacists look and see what you're selling? For the last fifty years 'effectiveness' means something very important in food and drug parlance. Effectiveness means—at least to me—that there'd be the scientific evidence to demonstrate that something worked…I wonder whether many pharmacists really have given up their role as health professionals, as pharmacists. Maybe they're no longer in control of the store. Maybe they're just behind the counter, and anything in front of that counter goes. But it's time for that profession to take responsibility for what it's selling."[20]

** Unethical and Ignorant Behavior of Pharmacists[21]

Stephen Barrett, M.D.
July 19, 2011

Most pharmacists who work in retail pharmacies have a serious potential conflict of interest. On the one hand, they are professionals, expected to be knowledgeable about drugs and to dispense them in a responsible and ethical manner. On the other hand, their income depends on the sale of products. Before the FDA's OTC (Over-the-Counter) Drug Review drove most of the ineffective ingredients out of OTC drug products, few pharmacists protested or attempted to protect their customers from wasting money on products that did not work.

Today nearly all pharmacies carry irrationally formulated dietary supplements, and many stock dubious herbal and homeopathic products in addition to standard drugs. Chain drugstores are more likely to do so than individually owned stores. Hospital pharmacies are less prone to do so. In the late 1990s, some pharmacy trade publications—most notably the now-defunct Natural Pharmacist—suggested that "natural products" offered opportunities to make up for prescription drug revenues lost as a result of managed care and other cost-containment programs. Two pharmacy suppliers aligned with this trend were The JAG Group of San Clemente, California [1] and HealthTrust Alliance, of Lawrenceville, Georgia [2], both of which offered comprehensive programs through which pharmacists could market dietary supplements and herbal and homeopathic products to their customers. I thought that these programs were appalling because (a) few common ailments can be helped with dietary supplements or herbal products, (b) nutrient depletion related to drug use is not common, (c) homeopathic products are worthless, (d) pharmacists are not qualified or legally permitted to be "natural healthcare practitioners, and (e) recommending products for hundreds of ailments would be outside the scope of pharmacy practice, constitute the illegal practice of medicine, and violate state laws against theft by deception. As far as I can tell, neither of these programs is active today, but the percentage of pharmacists who sell dubious products has increased considerably.

In the mid-1980s, two dietitians examined the labels of vitamin products at five pharmacies, three groceries, and three health-food stores in New Haven. Products were considered appropriate if they contained between 50% and 200% the U.S. RDA and no more than 100% of others for which Estimated Safe and Adequate Daily Dietary Intakes existed. Only 16 out of 105 (15%) of the multivitamin/mineral products met these criteria [3]. Although current data on the percentage of irrational formulations in pharmacies is not available, everyone I have ever visited carried lots of them.

Pharmacy compounding is another problematic area. Compounding is the creation of a drug product by mixing ingredients. Compounding has legitimate uses

and is most often done honestly at physician request. However, some pharmacies compound drugs that have little or no rational use, including some that are potentially dangerous and lack FDA approval [4]. Two such product categories are chelating agents [5] and bioidentical hormones [6], both of which have been the target of FDA warnings.

Widespread Ignorance

If asked directly whether an ineffective product is worthwhile, most pharmacists will answer to the best of their ability. However, many surveys have shown that pharmacists are poorly informed about herbal products, many types of dietary supplements, and homeopathic products.

- In 1985, reporters from Consumer Reports magazine visited 30 drugstores in Pennsylvania, Missouri, and California. The reporters complained of feeling tired or nervous, and asked whether a vitamin product might help. Seventeen were sold a vitamin product and one was sold an amino acid preparation. (None of the products had any ingredient that was effective against fatigue or nervousness.) Only 9 of the 30 pharmacists suggested that a doctor be consulted [7].
- In 1987, two pharmacy school professors sent a questionnaire to 1000 pharmacists in the Detroit metropolitan area and received 197 responses. Among the 116 who identified their five most-common reasons for recommending vitamins or minerals, 66 (56%) listed fatigue and 57 (49%) listed stress [8]. (Neither reason is valid.) Homeopathic products have no therapeutic value [9] But in response to a question about homeopathy, 27.4% said it was "useful," 18.3% judged it "useless," and 54.3% "didn't know" [10].
- A study published in 1993 found that 47% of pharmacy students at two Philadelphia schools were taking supplements. The study demonstrated that many of them mistakenly believed that supplements could improve energy and relieve stress and that a year of school had only a modest influence on these beliefs [11].
- Among 533 Minnesota pharmacists who were asked whether they used or recommended one or more of 34 herbal or natural products, 282 (53%) reported that they had personally done so, 240 (45%) reported that they had recommended them to family members, and 432 (81%) reported that they had recommended them to patients. The most popular choices were echinacea, aloe, zinc, glucosamine, chondroitin, ginkgo biloba, garlic, melatonin, chromium picolinate, ginseng, and St. John's wort [12]. (Except for melatonin, these substances have little or no practical use.)
- A study at the University of Minnesota School of Pharmacy published in 2006 found that only 26% of faculty members and 3% of senior PharmD students considered homeopathy ineffective and 23% of faculty members and 35% of students said they had no opinion [13].

Despite considerable effort, I have located no evidence that pharmacy educators generally perceive misbeliefs about ineffective products as a problem area and are trying to produce students who think clearly about these products.

What Happened to Ethics?

Merlin Nelson, M.D., Pharm.D., coauthor of the above-mentioned 1987 survey, has asked pharmacists why they promote and sell food supplements to healthy individuals who don't need them. He concluded: The most common reason is greed. Advertising creates a demand that the pharmacist can supply and make a profit. "If I don't sell them, they'll just go to my competition down the street," is a common response. Pharmacists are apparently more interested in a sale than in the patient's welfare...Rather than just recommending a multivitamin to patients concerned about obtaining enough vitamins in their diet, pharmacists should offer sound nutritional advice or provide referrals to experts in nutrition such as registered dietitians [14].

In 1988, James T. O'Donnell, PharmD, a pharmacy professor at the Rush Presbyterian-St. Lukes Medical Center in Chicago, criticized the sale of worthless weight-control products through retail pharmacies. He said that pharmacists had a duty to investigate questionable claims, and should not sell bogus products [15].

Pharmacists are also the only recognized health professionals who sell tobacco products, which cause more death and years of lost life than any other consumer product. Although many pharmacies have stopped offering cigarettes, many others still carry them.

In March 1998, at a symposium sponsored by the Good Housekeeping Institute, former FDA Commissioner David A. Kessler, M.D, J.D., sharply criticized the willingness of a neighborhood chain drugstore to sell supplements whose labels made improper claims. Next to the pharmacy counter, he had counted 26 displays with such claims as: "targeted mind improvement," "advanced memory and concentration formula," memory support complex," helps increase serotonin

level," "immune enhancer," "leg health," "cartilage rejuvenation and repair," and "As featured in the book, 'The Arthritis Cure.'" He told the symposium audience: I wonder whether many pharmacists really have given up their roles as health professionals, as pharmacists. Maybe they're no longer in control of the store. Maybe they're just behind the counter, and anything in front of that counter goes. But it's time for that profession to take responsibility for what it's selling [16].

The code of ethics of the American Pharmacists Association (APHA) does not state that pharmacists have a duty to prevent dubious products from lining their shelves [17]. A few states have laws declaring it illegal for pharmacists to sell ineffective products, but these laws have never been applied to the sale of OTC products. In 1995, the National Association of Boards of Pharmacy passed a resolution critical of homeopathy. Though commendable, this resolution has had no visible impact on pharmacy practice.

The American Society of Health-System Pharmacists (ASHP), which mainly represents pharmacists who work in hospitals and managed care programs, has issued a position statement on the use of dietary supplements which states (in part):

ASHP believes that the widespread, indiscriminate use of dietary supplements presents substantial risks to public health and that pharmacists have an opportunity and a professional responsibility to reduce those risks.

ASHP believes that the criteria used to evaluate dietary supplements for inclusion in health-system formularies should be as rigorous as those established for nonprescription drugs and that the self-administered use of dietary supplements during a health-system stay may increase risks to patients and liabilities to health care professionals and institutions[18],

This statement is commendable, but I have seen no organized effort by pharmacists, their professional organizations, or their schools to raise the relevant educational or ethical standards.

W. Steven Pray, Ph.D., R.Ph., a professor at the Southwestern Oklahoma State University College of Pharmacy has concluded that pharmacists sell homeopathic products for three reasons: willful ignorance, blatant dishonesty, and overwhelming greed. He also notes that the APhA endorses homeopathic products by (a) permitting homeopathic sellers to rent booth space at its conventions, (b) providing proponents with a national forum that reaches APhA members, and (c) publishing book chapters and articles that fail to adequately criticize homeopathy [19] In another article, Pray notes that the word "quackery" has virtually disappeared from the vocabulary of pharmacists and that: Like other professions, pharmacy is under tremendous external and internal pressure to accept and recommend products lacking proof of safety and efficacy, and not grounded in evidence-based medicine. Pharmacy colleges should include a required course in unproven medications and therapies. It should address the benefits of an evidence-based approach to medicine in general and to pharmaceutical care in particular. It should discuss the ethical dilemma inherent in recommending products lacking proof of safety and efficacy. When unproven systems are taught (eg, homeopathy), they must be clearly labeled as such and their departures from evidence-based medicine clarified for students.

Instead, he reports how, for more than ten years, nearly every communication channel through which pharmacists receive information about dietary supplements, herbs, and homeopathic products has portrayed them more favorably than they deserve. To counter this, he urges pharmacy schools to provide the naked truth in a course that minces no words and even asks students to complain to the FTC about misleading product advertising [20].

The Bottom Line

I believe that pharmacists have as much of an ethical duty to discourage the use of inappropriate products as physicians do to advise against unnecessary surgery or medical care. Very few pharmacists do so. Pharmacy journal editors ignore this problem. Hospital-based pharmacists generally exhibit a higher standard of practice, but very few of them are speaking out about the problems described in this article.

Pharmacists and their customers have millions of conversations per year about dietary supplements, herbs, and homeopathic products. Can you imagine what would happen to quackery in America if pharmacists discouraged inappropriate purchases of these products? Do you think that will ever happen?

References

1. Some notes on the activities of Joanne Garneau. Pharmwatch Web site, June 13, 2011.
2. Reference article under construction.
3. Bell LS, Fairchild M. Evaluation of commercial multivitamin supplements. Journal of the American Dietetic Association 87:341-343, 1987.
4. Bouts BA. The misuse of compounding by pharmacists. Quackwatch, Nov 26, 2005.
5. FDA takes action against compounded menopause hormone therapy drugs. FDA news release, Jan 8, 2008.
6. Edetate disodium (marketed as Endrate and generic products). FDA Public Health Advisory. Jan 16, 2008.
7. The vitamin pushers. Consumer Reports 51:170-175,

1986.
8. Nelson MV and others. A survey of pharmacists' recommendations for food supplements in the U.S.A. and the U.K. Journal of Clinical Pharmacy and Therapeutics 15:131-139, 1990.
9. Barrett S. Homeopathy: The ultimate fake. Quackwatch, Aug 23, 2009.
10. Nelson MV, Bailie GR. Pharmacists' perceptions of alternative health approaches: A comparison between U.S. and British pharmacists. Journal of Clinical Pharmacy and Therapeutics 15:141-146, 1990.
11. Ranelli PL, Dickerson RN, White KG. Use of vitamin and mineral supplements by pharmacy students. American Journal of Hospital Pharmacy 50:674-678, 1993.
12. Welna EM and others. Pharmacists' personal use, professional practice behaviors, and perceptions regarding herbal and other natural products. Journal of the American Pharmacists Association 43:602-611, 2003.
13. Harris IM and others. Attitudes toward complementary and alternative medicine among pharmacy faculty and students. American Journal of Pharmaceutical Education 70(6):1-7, 2006.
14. Nelson MV. Promotion and selling of unnecessary food supplements: Quackery or ethical pharmacy practice? American Pharmacy NS28(10):34-36, 1988.
15. O'Donnell JT. Nutrition Fraud: Vitamins and obesity—pharmacists' responsibilities. Journal of Pharmacy Practice 1:131-145, 1998.
16. Kessler DA. Why the FDA does not approve supplements. Speech at Good Housekeeping Institute Consumer Safety Symposium: Dietary Supplements & Herbal Remedies. New York, March 3, 1998.
17. American Pharmaceutical Association. Code of Ethics for Pharmacists. Oct 27, 1994.
18. ASHP statement on the use of dietary supplements. American Journal of Health-System Pharmacists 61:1707-1711, 2004 (reviewed and considered "still appropriate" in 2009).
19. Pray WS. Why pharmacists should not sell homeopathic products. Focus on Alternative and Complementary Therapies 15:280-283, 2010.
20. Pray WS. Ethical, scientific, and educational concerns with unproven medications. American Journal of Pharmaceutical Education 70(6), article 141, 2006.

References

1. Veatch RM, Haddad A. Case Studies in Pharmacy Ethics. New York, NY: Oxford University Press 1999:viii.
2. McQueen CE. Pharmaceutical Care with Dietary Supplements: Concepts and Common Sense. Bethesda, MD: American Society of Health-System Pharmacists 2007:10.
3. Buerki RA, Vottero LD. Ethical Responsibility in Pharmacy Practice. Madison, WI: American Institute of the History of Pharmacy 2002:125.
4. Abood RR, Brushwood DB. Pharmacy Practice and the Law. Gaithersburg, MD: Aspen Publishers 1994:317.
5. Pray WS. Nonprescription Product Therapeutics, 2nd ed. Baltimore, MD: Lippincott Williams & Wilkins 2005.
6. How to spot health fraud. Food and Drug Administration. https://www. fda.gov/Drugs/EmergencyPreparedness/BioterrorismandDrugPreparedness/ucm137284.htm (accessed 02 Feb 2021).
7. CPG Sec. 120.500 Health fraud-factors in considering regulatory action. Food and Drug Administration. https://www.fda.gov/ICECI/ComplianceManuals/CompliancePolicyGuidanceManual/ucm073838.htm (accessed 02 Feb 2021).
8. Medical quackery. Department of Agriculture, Trade and Consumer Protection (WI). https://datcp.wi.gov/Documents/Medicalquackery204.pdf (accessed 02 Feb 2021).
9. Complementary and alternative medicine. National Cancer Institute. https://www.cancer.gov/about-cancer/treatment/cam (accessed 02 Feb 2021).
10. Ernst E, Cohen MH, Stone J. Ethical problems arising in evidence based complementary and alternative medicine. J Med Ethics. 2004;30. https://jme.bmj.com/ content/30/2/156 (accessed 02 Feb 2021).
11. Pray WS. A History of Nonprescription Product Regulation. New York, NY: Pharmaceutical Products Press 2003:205-238.
12. Code of ethics. American Pharmacists Association. https://www. pharmacist.com/code-ethics (accessed 24 Mar 2019).
13. Nelson V. Promotion and selling of unnecessary food supplements: quackery or ethical pharmacy practice? Am Pharm 1988;NS28:34-6.
14. Ryan KJ, Brady JV, Cooke RE, et al. The Belmont Report. The National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research. https://www.hhs.gov/ohrp/sites/default/files/the-belmont-report-508c_FINAL.pdf (accessed 02 Feb 2021).
15. Wilson AL, Hughes TF, Eckel FM. Issues in Pharmacy Practice Management. Gaithersburg, MD: Aspen Publishers 1997:71.
16. Ormrod JE. Human Learning, 6th ed. Upper Saddle River, NJ: Pearson Education, Inc 2012.
17. Festinger L. A Theory of Cognitive Dissonance. Stanford, CA: Stanford University Press 1957.
18.McLeod SA. Cognitive dissonance. Simply Psychology. https://www.simplypsychology.org/cognitive-dissonance.html (accessed 02 Feb 2021).
19. Shaw DM. Homeopathy is where the heart is: five unethical effects of funding unscientific "remedies." J Med Ethics. 2010;36. https://jme.bmj.com/content/medethics/36/3/130.full.pdf (accessed 02 Feb 2021).
20. Kessler DA. Why the FDA does not approve supplements. Quackwatch, Available at: https://www.quackwatch.org/02ConsumerProtection/kessler.html (accessed 02 Feb 2021).

21. Barrett S. Unethical and ignorant behavior of pharmacists. Quackwatch. Available at: https://www.quackwatch.org/01QuackeryRelated Topics/pharm.html (accessed 02 Feb 2021).
22. Zohny H, King M. Homeopathy: healing the world (in very very very small doses). J Med Ethics. 2009. https://blogs.bmj.com/medical-ethics/2009/02/07/homeopathy-healing-the-world-in-very-very-very-small-doses/ (accessed 02 Feb 2021).
23. Zohny H, King M. A very small amount of relevance. J Med Ethics. 2012. https://blogs.bmj.com/medical-ethics/2012/04/20/a-very-small-amount-of-relevance/ (accessed 02 Feb 2021).
24. Pray WS. Why pharmacists should not sell homeopathic products. Focus Altern Complement Ther. 2010; 15:280-283.
25. Marotta R. Pharmacists remain among most trusted professions. Pharmacy Times. https://www. pharmacy times.com/news/pharmacists-remain-among-most -trusted- professions (accessed 02 Feb 2021).
26. Murphy J. Public views pharmacists as trusted professionals with high levels of virtue. Pharmacy Times. https://www.pharmacytimes.com/publications/career/2020/CareersSpring2020/public-views-pharmacists-as-trusted-professionals-with-high-levels-of-virtue (accessed 22 Oct 2020).

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