

TEACHING

the History & Social Aspects of Pharmacy

New Series No. 1 (Fall 2001)

An online newsletter of the American Institute of the History of Pharmacy. Copies are available as well at the Institute website of www.aihp.org.

Message from the editor

Welcome to the premier issue of the resurrected newsletter, *Teaching the History and Social Aspects of Pharmacy*. This newsletter has been in existence before, from 1977 to 1992, when the final issue (No. 25) of the previous series was published. Past editors were Glenn Sonnedecker, Bonnie Svarstad, John Parascandola, Mickey Smith, Ernst Stieb, and most recently, John Scarborough (history), and Paul Ranelli (social aspects). Ten years is a long time to be deprived of the interesting and insightful information this newsletter used to provide. I hope this absence of information will be filled with the revival of this newsletter. This newsletter will be issued twice a year (Autumn and Spring) in an electronic format and distributed via email from a list managed by Greg Higby, Director of the American Institute of the History of Pharmacy (please contact Greg at: ghigby@mhuf.facstaff.wisc.edu to be placed on the "mailing" list). The Newsletter also will be posted on AIHP's website (www.aihp.org).

As the new editor, I strongly encourage you, the reader, to become involved with your newsletter. The quality and value of this newsletter will represent only what the readers have contributed to it: short articles on courses and course materials; book, film, museum, software, and other reviews; updates from the social sciences; announcements for conferences, grants, and publishing opportunities; news stories; interesting websites; commentaries and viewpoints; and most importantly, feedback on its content and format.

I look forward to receiving your comments and suggestions for improving the newsletter, as well as your literary contributions. The success of the newsletter depends on dedicated and involved readers, especially those of you who have something to say about the role of history and the social sciences in pharmaceutical education and practice. So contribute your ideas and experiences for the benefit of others and Enjoy!

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The next issue of *Teaching the History and Social Aspects of Pharmacy* will be published during Spring of 2002. The **deadline** for submitting items, announcements, and materials for that issue is **15 February 2002**. Please submit materials electronically in **MS Word** to: Mike Montagne at mmontagne@mcp.edu (Mass. College of Pharmacy & HS, 179 Longwood Ave., Boston MA 02115; phone: 617-732-2995; fax: 617-732-2236).



A Message from the Previous Editor

I am pleased AIHP is bringing back the “Teaching” Newsletter after halting publication in 1992. I was the editor of the “social aspects” portion for four years when AIHP ceased publication. Back then, the U.S. Mail was the only way to get newsletters to interested faculty and patrons. Now, other means of communication will make the newsletter more timely and visually exciting. And, there is no doubt that pharmacy’s social aspect has continued to grow as an integral part of pharmacy practice and education. I wish Michael Montagne, the new editor, all the best. A rejuvenated “Teaching” is in very capable hands.

- Paul L. Ranelli, Dean,
University of Wyoming School of
Pharmacy

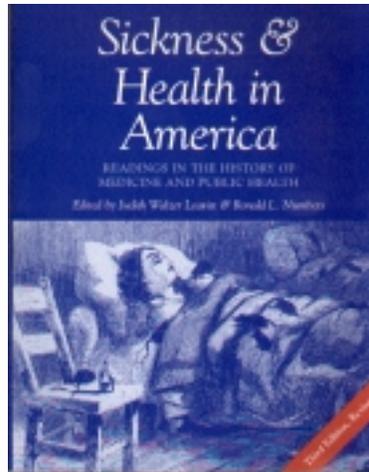
Courses & Course Materials

“Magic Bullets” in Social Context

One of the courses which I teach twice annually at the Massachusetts College of Pharmacy and Health Sciences is Evolution of the Health Professions: Cultural and Social History Per-

spectives on Health and Disease in America. It is required for some college programs (e.g., physician assistant) and is an elective for others, including the doctor of pharmacy program (the course is often nearly one-half pharmacy students). The course focuses on the social history and cultural meanings of health and disease; changes and conflicts in education, work culture; and images of the health professions in popular American culture with various professions providing case studies. The class studies in historical context the ways in which public policy, social attitudes, class, gender, race, and ethnicity have influenced how various Americans experience health and disease. Social and cultural, public policy, and biomedical approaches to U.S. health problems are discussed as ways of raising questions about health professional roles in specific historical contexts. Critical thinking, communication skills, social and civic awareness, social responsibility, and social interaction skills are emphasized in the examination of various course materials (reading assignments, documentary films, Hollywood film clips, etc.), in class exercises, and in class writing and oral presentation assignments (including team projects).

While there are a variety of reading assignments, the major text for the course is Judith Walzer Leavitt and Ronald L. Numbers, eds., *Sickness and Health in America: Readings in the History of Medicine and Public Health*, (University of Wisconsin Press, 2nd Ed., 1997). The text’s opening overview looks at the most likely candidates accounting for the historical



decline of infectious diseases and the increase in life expectancy at the turn of the twentieth century—medical practice, “public-health measures, and improvements in diet, housing, and personal hygiene.” I raise questions about what we should emphasize as important factors for looking at health and disease demographics at the turn of the twenty-first century (i.e., the derstanding historical patterns of health and disease in the United States, I focus on the role of “magic bullets” or “miracle/wonder drugs,” especially antibiotics, and their use in treating infectious diseases in the twentieth and twenty-first centuries in relation to various social, political, economic, and cultural contexts. The class has previously discussed what drug therapies were used by a variety of health practitioners in early America and the nineteenth century and why they used them, as well as, at the turn of the twentieth century, the rise of the “germ theory of disease” and health practitioner and public responses to it.

I provide discussion questions (which incorporate learning objec-

tives) for the unit to aid students in their reading and viewing. The focus of the discussion questions (which are considered both in small groups and when the class comes together as a whole) have included:

- the rise of the “golden age” of antibiotics and public response to “magic bullets,” and/or “miracle or wonder drugs” in post World War II United States.

- how socio-political beliefs and behaviors of public officials and the ordinary public influence scientific research, and public reactions to infectious diseases and the search for drug treatments in the past and present.

- how science, the scientific method, drug therapies, researchers/clinicians/public health practitioners, and government officials and public health institutions are portrayed in the mass media over time (e.g., *Dr. Ehrlich’s Magic Bullet*, 1940 versus *Panic in the Streets*, 1950 and *Outbreak*, 1995).

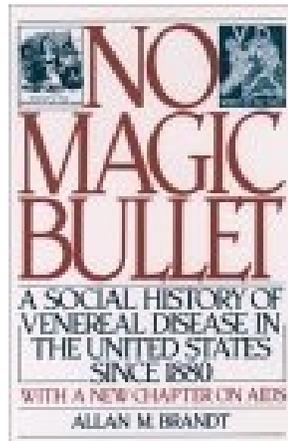
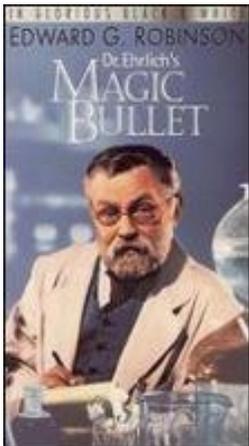
- the impact of antibiotics on therapeutics (e.g. infectious diseases and surgery) in the second half of the 20th century and the growth and popular image of the pharmaceutical industry in relation to their role in research, development, and distribution of “magic bullets.”

- how cataclysmic events influence drug research and the distribution and demand for “magic bullets” (e.g. World War II and penicillin, or given the recent tragic events of September 11, 2001, discussion this fall semester has included the public rush to purchase

such antibiotics as Cipro^R and expectations for it as a “wonder drug” to treat anthrax or other feared outbreaks of epidemic infectious diseases in the light of possible bioterrorist threats.).

— the rise of problems in the misuse and overuse of antibiotics in late 20th and early 21st century; the “bug-drug” perspective in contemporary therapeutics; the need for a focus on the “limitations” of “wonder drugs” in relation to improving public health and decreasing health care costs.

— a focus on how infectious diseases (e.g., syphilis, in the case of the research of Paul Ehrlich in his discovery of salvarsan in 1910, AIDS in the early 21st century) are socially “stigmatized” in the context of individual character, race, nation, or religion, and the effect on the search for and distribution of new drug treatments.



For the unit, I use of variety of course materials in order to facilitate discussion. These include: John Parascandola’s “The Introduction of Antibiotics into Therapeutics,” (from the *Sickness and Health*, text); a short

version of the 1940 Hollywood film, *Dr. Ehrlich’s Magic Bullet*, produced (in collaboration) by Warner Brothers and the United States Public Health Service (clips from the 1940 Hollywood film could also be used. This film was recently released on videotape and should be easily available from local public libraries or through inter-library loan); circulation around the classroom of such primary print documents as the 1950 paperback copy of Paul De Kruif’s 1926 book, *Microbe Hunters*; reference to secondary sources for further discussion, e.g. Allan M. Brandt’s *No Magic Bullet: A Social History of Venereal Disease in the United States Since 1880*; overheads which provide a sampling of recent news articles to illustrate how the popular press communicates information about “miracle” drugs in the late 20th and early 21st centuries; and articles students have found in the popular press which have appeared since the semester began. News article titles have included “Antibiotic hailed as new frontier for infection”; “As Bacteria Outsmart Old Antibiotics, Drug Makers Ready New Arsenal”; “Resistance Fighters: Scientists Launch counterattack on resistant bugs by pumping of potency of drugs”; “Study concludes antibiotics often unnecessary”; “Insurers Prepare to Fight Drug-Resistant Bacteria—With Reams of Data”; and “Anthrax Scare Prompts Run on an Antibiotic.” I also distributed John Swann’s essay, “A Century of Change: The Coming of Miracle Drugs,” from the Spring 2001 issue of *Apothecary’s Cabinet* when it was released for distribution to colleges of pharmacy.

The unit is concluded with a general discussion of the social effects of public education through the mass media over time —Hollywood films, documentaries, posters, pamphlets, television commercials, print advertisements, newspaper and television news stories—in influencing public understanding of drug research and development; drug therapy and the role of health practitioners in providing counseling about appropriate drug therapy; and the importance of adequate public health infrastructure and successful collaboration among social and political agencies with the public and health professionals.

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Helping Pharmacists Help Patients of Low Literacy

Increasing numbers of American adults in need of medical treatment lack the medication literacy necessary for meeting the demands of a changing healthcare system and complex medical information. These adults may include people who exhibit low reading levels, limited education, low English proficiency, age-related disabilities, or simply serious illness - problems which can also impair the competence needed to prevent illness. Such problems often become particularly salient in the medication transaction, a direct meeting between patient and healthcare professional in which mutual understanding is crucial to

success. The problems of medication literacy are thus two-way problems, and they impact on the training of pharmacists and other healthcare professionals who instruct and counsel patients on the use of medications. At the Massachusetts College of Pharmacy and Health Sciences, in response to this social situation and its implications for training, the Medication Literacy Study Group (MLSG) has come together, a group of faculty members representing different disciplines who share a commitment to providing scholarly and practical support to help healthcare professionals and their patients meet medication literacy needs.

More specifically, by “medication literac” the MLSG refers to the level of competence with which patients can find, understand and apply the information they need to effectively use medications and other healthcare treatments. One of the MLSG initiatives showing immediate positive results is an elective course entitled “Medication Literacy.” Open to students of all degree programs in the College, this course focuses on the medication transaction between healthcare professionals and patients of low medication literacy. Students discuss issues raised when healthcare professionals try to facilitate such patients’ access to the information and resources they need. Instructional approaches already developed by healthcare professionals and adult educators are reviewed in the course, and students develop their own approaches to meet the needs of specific populations.

The course includes didactic, practice, and problem-posing compo-

nents. In the didactic component, assigned readings and audio-visual materials form the basis for classroom discussions, workshop activities, and writing. The practice component includes activities such as assessing and designing instructional healthcare materials, role-playing relevant situations, and keeping a communications journal. The problem-posing component includes needs assessment and the development of instructional materials for specific patients or patient groups.



Relevant readings for all components are provided by the excellent textbook, Teaching Patients of Low Literacy Skills (Doak, Doak, and Root. Philadelphia: J.B. Lippincott Co., 1996). The authors pay particular attention to: the reading process; aspects of difficulty in reading materials; ways in which adults understand, learn, and remember through language and experience; educational principles; case studies; and sample instructional materials.

These readings are supplemented with relevant articles from the current medical literature, and with activities which focus on real patient populations and produce real instructional materials and techniques. By the end of the course, students are expected to have acquired the competence to: (1) understand adult literacy in the United States, including the social situation, the complex nature of literacy, and relevant educational theory; (2) assess patients' language and literacy levels, as well as the effectiveness of specific instructional materials; (3) conduct a needs analysis of a particular patient population in a medication transaction, and design instructional materials adequate to meet the needs; and (4) assess patient comprehension.

At this writing, "Medication Literacy" is being offered for the second time. As we work to perfect the design of the course, students are positive about its usefulness. Some feel that all healthcare professionals in training should be encouraged to take such a course.

Additional projects the MSLG is working on include the development of a prototype model for assessing and serving specific patient populations and training healthcare professionals, and an independent research project on medication pictograms.

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Book & Museum Reviews

Picture of Health: Illness and Healing in New England, 1790 - 1860

At: Old Sturbridge Village, Sturbridge, MA.

The Picture of Health exhibit aims to paint a picture of health care and healers in early 19th century New England, in the years preceding modern antiseptics, anesthesia, or antibiotics. Herbal remedies, hydrotherapy and treatments with static electricity were common, and most health care was home-based.



The exhibit highlights the roles of a diverse group of health-care practitioners: physicians, Native-American healers, midwives, and family members. Of the approximately 2000 physicians working in New England in the 1830's, only one-third were graduates of a formal training program. Most were trained by apprenticeship to

dispense mineral or herbal medications, and to perform therapeutic procedures such as bloodletting, blistering, and the setting of broken bones or amputations. Treatment options now seem disturbingly rudimentary.

The Picture of Health exhibit is drawn from the museum's extensive collections and research, and provides a fascinating glimpse into health care before modern medicines and techniques. Some of the intriguing and ingenious devices on display include a gout crane built by Joseph Trumbell of Worcester, Massachusetts in 1830. It was used to elevate his gouty foot to relieve the pain of uric acid crystals in the joints. Although footstools were more commonly used for this purpose, the crane could achieve higher elevation, and was therefore presumably more effective. Equally interesting is the reminder that preparations derived from the Meadow Saffron plant (*Colchicum autumnale*, the source of colchicine), were known by 1830 to be effective against gout.

Additional artifacts on display include bottles of 19th century patent medicines, medical texts of the time, wooden leg splints, and three early wheelchairs, known at the time as "mechanical chairs" or "go-chairs." One amusing example was constructed by adding an axle to a common Windsor chair, its legs still attached! Also particularly gripping is a rather grisly display of 1800s dental instruments. Various different sizes of "tooth keys," an instrument developed in 1730 to extract teeth, can be seen.

Copies of records of admission to the State Lunatic Asylum at Worcester, Mass., constructed in 1833, indicate that most patients were committed by the courts for “intemperance,” “homicidal behavior,” or other similar offenses. Sadly, these documents attest also to the fact that very few of the patients were discharged alive.

Another section of the exhibit illustrates how New Englanders dealt with death. A horse-drawn hearse, made in 1850 in Thompson, CT., is accompanied by several wooden coffins, some child-sized, and illustrations of the humorous gravestones found in New England after the 1700s. Since visits to graveyards were uncommon until about 1840, families instead fashioned elaborate memorial objects, such as engraved brass or silver plaques, painted portraits, or silk embroidery memorial scenes. Several well-preserved examples are on display.

The exhibit continues until January 1, 2002, and will be a fascinating tour for anyone interested in learning more about 19th century healthcare. Visit the Museum during the autumn season and also enjoy the colorful New England foliage. For times and directions, see www.osv.org or call 1-800-SEE-1830.

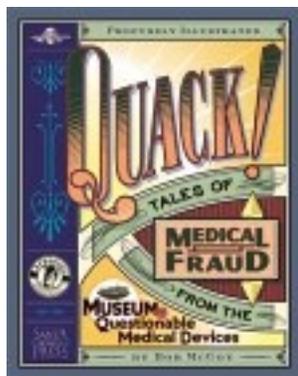
- Barbara LeDuc,
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Quack! Tales of Medical Fraud from the Museum of Questionable Medical Devices. By Bob McCoy. Published by the Santa Monica Press, Santa Monica, CA. 2000. Soft-cover, 240 p., \$19.95. (1-800-784-9553; www.santamonica.com)

This wonderful, delightful, ludicrous book is, to quote from its cover, “A smorgasbord of medical lunacy.” Bob McCoy, curator of the Museum, has written the book to “share his collection of the hilarious, horrifying, and preposterous medical devices that have been foisted upon the public in their quest for good health.”

Eleven chapters cover topics such as quackery in general, mechanical, magnetic or electric devices, radionics, radium and ray treatments, and therapies involving psychology, beauty and, of course, sex. The first chapter, “Quackery: Common Questions and Their Answers” is profusely illustrated with patent medicine labels detailing their comically exaggerated claims as cures for every imaginable disease. In the chapter “Magnetism: The Curative Magic of Magnets,” there’s a copy of a glowing newspaper testimonial attesting to the unprecedented healing powers of the Therenoid, a magnetic belt reputed to remove harmful waste from the body. The following day, the same newspaper printed the author’s obituary! “Radium: Good for What Ails You” describes the use of radium as a health tonic in cold creams, mouthwashes, face powders, belts, and water crocks. “Psychology: Use Your Head - The Bumpy History of



Phrenology” describes the Psychograph, an instrument that used the position of bumps on a person’s head to measure thirty-two different mental faculties, and then printed out a rating for each. The final chapter, “Sex: Sex et Machina,” is side-splitting! Enough said!

This book is both uproariously funny and a valuable source of information on vintage medical instruments and contraptions. It would make a fabulous yet inexpensive Christmas present for anyone with a keen sense of humor and an interest in medical quackery. The greatest recommendation I can give this book is to note that almost everyone who has seen my copy has tried to steal it!

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(bleduc@mcp.edu)

Drug Websites

Many interesting websites have been developed that focus on drugs and drug use. Most sites, as in the real world, differentiate between medical and non-medical drug use, though

some listed below provide information on certain illicit drugs (e.g., marijuana, psychedelics) with the hope that therapeutic uses will be found. Readers should feel free to contribute their favorite websites on pharmacy, drugs and drug use to the Newsletter.

The Multidisciplinary Association for Psychedelic Studies (MAPS) (www.maps.org) is a non-profit research and educational organization, funded by members and donors, that studies the therapeutic potential of psychedelic drugs (including MDMA) and marijuana. They support research and create networks of scientists, clinicians, and funding agencies. They have been in existence for almost 20 years. They also produce an excellent Newsletter, with regular updates on scientific psychedelic research around the world, and offer many interesting drug books through their bookstore.

The Heffter Institute (www.heffter.org) is a non-profit research institute that creates networks of scientists, funds or assists in securing funds for research projects, and presents useful information on the status of specific drugs with regard to work on their therapeutic potential. The primary difference between MAPS and the Heffter is that MAPS often plays an advocacy role and works the political system to achieve important goals, while the Heffter is focused almost exclusively on research.

The Council for Spiritual Practices (www.csp.org) is a collaboration of scholars, clergy, and scientists dedicated to making direct experience of the sacred more available to people.

While it might seem unusual that a spiritual or “religious” group is listed under drug websites, CSP in fact focuses on methods for achieving spiritual and related experiences. One method is through the use of certain psychedelic drugs that possess, and here is the “word for the day,” entheogenic properties. Entheogen, a relatively new term, refers to “the God within,” thus suggesting that these drugs will produce spiritual (God-like) experiences. Many workers in this field have a real problem with this term, as might many readers, because drugs do not contain any effects (even God-like ones); they only alter an ongoing physiological process in the human body. But regardless of how you might feel about the term, there is a lot of interesting information on this site, including publications and links to other sites. Many people predict that drug-induced spiritual experiences will become more mainstream in the near future (with more people seeking spirituality after the tragic terrorist attacks in the U.S.).

The Lindesmith Center

(www.lindesmith.org) is named for a famous social psychologist and addiction researcher, Alfred Lindesmith. The Center is an independent institute that has merged recently with another related group (Drug Policy Foundation) to create a new organization that will probably change its name in the near future. They focus on policy issues surrounding illicit drugs and their use, and much of their work emphasizes the harm-reduction approach to drug-use problems.

Media Awareness Project (www.mapinc.org) is a very interesting and unique site. The content of this site is created through contributions, from readers, of news items from local (and even national and international) sources, mostly newspapers and magazines. Their service entails subscribing to newsletters that they issue electronically. I would recommend starting with the weekly newsletter, “Drug Sense Weekly,” which provides updates and summaries of what is issued in the daily newsletter (their daily newsletter can overwhelm your mailbox). In addition, there is little or no editing. Much of what is sent is repetitive because news story collectors in different parts of the US will submit the same article (in part because their local newspapers obtain their stories from the same Associated Press or other news service feed).

Mind Books (www.promind.com) is an on-line bookstore. It lists many drug books that you will never find in your local library, university library, or local bookstore. - Michael Montagne

The 12th International Social Pharmacy Workshop will be held on 12-16 and 16-19 August, 2002 in Sydney, Australia. The workshop theme is “Implementing Change - practitioner and patient perspectives.” The primary workshop will be held 12-16 August and an additional workshop is scheduled for 16-19 August. More information is available at: www.pharm.usyd.edu.au/socialpharmacyworkshop.