

Teaching the History & Social Aspects of Pharmacy

Issue #7

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Welcome to the seventh issue of Teaching the History and Social Aspects of Pharmacy. This newsletter is issued twice a year in an electronic format and distributed via email by Greg Higby, Executive Director of the American Institute of the History of Pharmacy (ghigby@mhub.facstaff.wisc.edu). The Newsletter also is posted on AIHP's website (www.aihp.org).

In this issue, the course material is an assessment instrument designed for use by preceptors to evaluate their pharmacy students' communication skills in real life practice settings. The fourth of Anne Marie Lane's ongoing column on *Remedies from Rare Books* focuses on remedies for coughs, hoarseness, and sore throats. The choice of this topic came from Anne Marie's personal experience of returning from a recent trip (a rare book conference) with a bad cold and not being able to alleviate certain symptoms quickly. It seems that for many of us, personal experiences often generate interest in specific historical matters and scholarly pursuits.

I look forward to your comments and suggestions for improving the newsletter, and most importantly, your contributions. Enjoy!

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Next Issue

The next issue of Teaching the History and Social Aspects of Pharmacy will be published during Spring of 2005. The **deadline** for submitting articles, announcements, and materials for that issue is **March 15, 2005**. Please submit materials electronically in **Word** to: Mike Montagne at mmontagne@mcp.edu (Mass. College of Pharmacy & HS, 179 Longwood Ave., Boston MA 02115, USA; phone: 617-732-2995). Thank you for your participation.

Course Materials

Assessing Pharmacy Students' Communication Skills At Their Site

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The assessment of oral communication skills is an ongoing effort at the Massachusetts College of Pharmacy and Health Sciences. We have a series of tests and screenings that students take from the time that they enter the school through the professional years. We

provide extra classes and tutoring for students that have apprehension about presentational speaking. English as a second language students, who need extra help with pronunciation and diction, are directed to a separate course that improves their comprehensibility. Debates, simulated counseling, role-plays, and other methods for improving speaking skills are integrated throughout the curriculum.

Naturally, some of us who teach in these areas have wondered if our students' preceptors could provide us with further feedback on how we are doing. To that end, a survey was designed to gather preceptors' impressions of our student's communication abilities with both patients and other members of the health care team. What follows are the instructions and survey instrument that we have recently begun to use.

To Our Preceptors:

We need your help to assess the strengths and weaknesses of the typical student that we send to your site. We are sure that if you have been a Preceptor over a period of time, you have noticed that some students' communication skills are stronger than others. In an attempt to obtain a more random sample, we are asking each of you to **answer this survey with respect to the most recent student that you mentored**. Please do not give us the student's name. Thank you in advance for your time and effort.

INSTRUCTIONS:

We are using a scaled rating system. After each item that follows you will see a blank underline notation that looks like this: _____. Please indicate your opinion by filling in the number that reflects your level of agreement or disagreement. Feel free to use the space below each item to add a few words to explain your rating. You may also write on the back of the survey if you wish.

RATING SCALE

1=Strongly Agree 2=Somewhat Agree 3=Neutral 4=Somewhat Disagree 5=Strongly Disagree

Communicating With The Patient:

Student's communication never breaks down completely.
(If there's any miscommunication, the student is aware of it and repairs it through restatements/verification etc.) **Rating : _____**

Student's speech is intelligible and audible.
(Pronunciation and grammar are accurate, frequent repetitions aren't required; student speaks up.) **Rating: _____**

Student's technical terms are pronounced and used correctly.
(Student sounds professional, and can use and say technical terms and drug names properly.) **Rating: _____**

Patients understand the student without great effort.
(Patient needs to make only normal efforts to understand and appear comfortable asking for clarification and further student response.) **Rating: _____**

Student appears to understand patients completely.
(Student can understand verbal meaning, “read between the lines.”) **Rating:** _____

Student seems to understand the nonverbal messages that patients present.
(Student correctly interprets and responds appropriately to intonation and body language.) **Rating:** _____

Student brings relevant psychosocial knowledge to the encounter. (e.g. Student can understand that a very elderly patient may have special needs and concerns.) **Rating:** _____

Student elicits complete and accurate information when appropriate. (e.g. OTC consultation.) **Rating:** _____

Student confirms patient’s and or caregiver’s understanding. (Student regularly verifies the patient’s perception of medication instructions etc.) **Rating:** _____

Student educates patient about the implementation of the treatment plan. (Student encourages adherence.) **Rating:** _____

Communicating about the patient’s pharmaceutical care issues to other members of the health care team (i.e. how students are able to talk to peers, nurses, techs, physicians and allied health professionals).

Student can incorporate relevant medical and scientific knowledge (Student is credible in the eyes of colleagues.) **Rating:** _____

Student’s information is accurate, paraphrased and organized.
(Student’s information doesn’t sound memorized; background data is provided as needed.) **Rating:** _____

Student adjusts presentation as necessary to meet the needs of the listeners and appropriate style is used for audience and context. (i.e. Student uses correct level of technical or formal speech, changing vocabulary, grammar, and style conventions as needed.) **Rating:** _____

Student interacts and responds to questions and comments.
(Student correctly interprets and responds appropriately to questions and comments from patients and colleagues.) **Rating:** _____

Student perceives essential data. (Student taking a phone call from a doctor can relay or record the essence of the conversation.) **Rating:** _____

Student’s confident demeanor inspires confidence. (Student’s self-confidence and professional behavior is shown by good eye contact, intonation and body language. Attitude would inspire confidence in patients and colleagues.) **Rating:** _____

Student can give a more formal presentation to peers and colleagues. (e.g. Student can give a drug information briefing) **Rating:** _____

Student provides appropriate support for other healthcare team members. (Student uses common courtesies with colleagues.) **Rating:** _____

Student can interview a peer medical professional on the patient's behalf. (Student can assess a patient's needs as they are described by another health professional.)
Rating: _____

Student can suggest a reasonable plan of action. (Student is capable of making recommendations.) **Rating:** _____

NAME: _____ (optional)

This assessment tool was developed by the author with some of the items provided by Professor Chris Parkhurst of MCPHS who specializes in ESL instruction. The N.Y.U. Medical School Initiative on Health Communication was also helpful in supplying ideas for areas of inquiry.

We do not as yet have enough surveys in hand to come to a firm conclusion on how we are doing. However, some preceptors have spontaneously thanked us for taking the initiative. Several seemed appreciative of the opportunity to let us know what it is like to have our students' performance put to the test in the "real life" professional setting. At this point we are sharing the survey with the hope that other Pharmacy faculty and administrators will find it useful and begin to gather data. Please be in touch with Helen Meldrum at MCPHS to share your plans for using this assessment instrument.

Special Column

REMEDIES FROM RARE BOOKS IV

by

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*FOR COUGHS, HOARSENESS, AND SORE THROATS:
drops, lozenges, troches, pastilles, syrups, candies, pills,
powders, drinks, gargles, & "a spoonful of sugar"*

Introduction:

Elias Smith wryly observed, in his 1837 American Physician and Family Assistant: "It is a common thing for people to say they have a very bad cold, and indeed I never knew them to have a good one."¹ He goes on to describe the variety of coughs: "This is a word much used by people in general. They have a bad cough, an hard dry

cough, an hacking cough, tedious cough, a wearing cough, whooping cough, consumptive cough, nervous cough, stomach cough, lung cough, &c. &c."²

Over the centuries, people with coughs, hoarseness, and sore throats--from whatever underlying causes--have sought relief. When today's public goes to their local pharmacies for these problems, if they do not have specific prescriptions from physicians in hand, they are faced with a bewildering array of over-the-counter products. This quantity and ease of access makes it easy to take all those little throat lozenges for granted. But, what did people in the past do for coughs and throat irritations? What were the ingredients in their remedies? Are any of those ingredients still used today?

Historical References:

It appears that since ancient times, those in healing capacities combined ingredients to remedy the above-mentioned problems. For example, the 2nd century C.E. Greek physician Galen commended a cough remedy from Heraclides, an earlier Empiric: it was composed of four drams each of juice of hemlock, juice of henbane, castorum, white pepper, and costus; and 1 dram each of myrrh and opium.³ The Oxford English Dictionary (OED)⁴ is always a handy source for its word use quotations from earlier centuries. Following are some of their terms and references relevant to this study.

Under "cough," one of the entries is cough-drop or lozenge: a 'drop' or lozenge taken to cure or alleviate a cough. "Coughwort:" a name proposed by Gerarde for the Coltsfoot. 1597: Gerarde, *Herbal*, cclxxvii, 2, 667: "Tussilago (Englished to Coughwoort)" 1851: Mayhew, *London Labour*, I, 3/1: "Vendors of ...sweetmeats, brandy-balls, coughdrops"

"Coltsfoot" (named from the shape of the leaves), leaves used for smoking as a cure for asthma, etc.; also an infusion of the leaves. Common name of *Tussilago farfara*, a common weed (also called in the 16th c. "Bethicon"): 1626: Bacon, *Sylva*, 560: "The vapor of Coltsfoot hath a sanative virtue towards the Lungs."

"Coltsfoot candy:" rock or candy made with the leaves of the coltsfoot, used as a remedy for coughs and colds; so coltsfoot stick:

1861: Mayhew, *London Labour*, II, 78: "a street-vendor of cough-drops, horehound candy, coltsfoot-sticks"

"Horehound / hoarhound:" after the herb is described, the entry says that its aromatic bitter juice is much used as a remedy for coughs, etc. The historical citations for the word start in the year 1000 and continue throughout the Medieval period. One of note from Turner's *Herbal* might refer to singers' hoarseness and/or sore throat (a sixteenth-century printer's typo may be responsible for the "g" in the middle of the word instead of an "n"), and another citation attests to its nineteenth-century popularity:

1562: Turner, *Herbal*, II, 51 b: "Horehounde is good to be geuen with hony ynto them that syghg much."

1861: Delamer, *Kitch.Gard.*, 127: "Horehound lozenges are sold by most dispensing chemists, as expectorant medicine."

“Lozenge,” a small cake or tablet, originally diamond-shaped, of medicated or flavoured sugar, etc. to be held and dissolved in the mouth:

1845: Hood, *To J. Hume*, v: “Talk till hoarse; Have lozenges—mind Dawson’s—in your pocket.”

(Note: similar to the antacid tablets of today, lozenges were also used traditionally for digestive problems like “the Wynde” and “the Heart-burn;” and some have descriptive names like “vomiting lozenges.” Those types of lozenges are beyond the scope of this article.)

“Pastil / pastille,” a round lozenge, a troche, esp. an aromatic lozenge; a kind of sugared confection of a rounded flat shape (often medicated; a troche; a lozenge)

“Troche,” a flat round tablet or lozenge made of some medicinal substance powdered, worked into a paste with mucilage or the like, and dried:

1597: Gerarde, *Herbal*, ccxcvi, 696: “Troschies, or little flat cakes”

Remedies in Chronological Order

The following ten books in the Toppan Library give insights into traditional English and American healing methods regarding coughs, hoarseness, and sore throats.

Late Seventeenth Century:

Gervaise Markham, *The English House-wife*

(London: printed by J. Streater for George Sawbridge), 1668

“For a new cough” (p.10): “For a cough or cold but lately taken, you shall take a spoonful of Sugar finely beaten, and drop into it of the best Aqua vitae, until all the Sugar be wet through, and can receive no more moisture; then being ready to lie down to rest, take and swallow the spoonful of Sugar and so cover you warm in your bed, and it will soon break and dissolve the cold.”

“For an old cough” (pp.10-11): “But if the cough be more old and inveterate, and more inwardly fixt to the lungs, take of the powder of Betony, of the powder of Carraway seeds, of the powder of Shervit dried,⁵ of the powder of Hounds tongue, and of Pepper finely beaten, of each two drams, and mingle them well with clarified Hony; make an electuary thereof and drink it morning and evening for nine days together; then take of Sugare candy coursly beaten, an ounce of Licoras finely pared and trimmed, and cut into very little small slices, as much of Anniseeds and Coriander seeds, half an ounce, mix all these together, and keep them in a paper in your pocket, and ever in the day time when the cough offendeth you, take as much of this dredge as you can hold between your thumb and fingers and eat it, and it will give ease to your grief; and in the night when the cough taketh you, take of the juyce of Licoras, as much as two good barley corns, and let it melt in your mouth, and it will give you ease.”

“For hoarsness in the throat” (p.17): “Take a pint of running water, and three spoonfuls of hony, and boyl them together; and scum off the filth, then put thereto one ounce of small Raisins, and strain it well through a cloth, and so drink it morning and evening.”

“For a dry cough” (p.17): “Take of clean wheat, and of clean barley, of each a like quantity, and put them into a gallon and a half of fair water, and boil them till they burst, then strain it into a clean vessel, and add thereto a quarter of fine Lycoras powder and two peny worth of gumme Arabick, then boyl it over again and strain it, and keep it in a sweet vessel, and drink thereof morning and evening.”

William Salmon, Professor of Physick, Living at the Blew Balcony by Fleet-Street, *Polygraphice...to which is also added...An Abstract of Choice Chymical Preparations, fitted for Vulgar Use, for curing most Diseases incident to Humane Bodies* (London: printed for Thomas Passinger), 5th edition, 1685

Extractum Pectorale nostrum / Our Pectoral Extract (Chapter XXXIX, pp.735-37):

I. Take Extract of Liquorice, Lozenges of Sugar, pearled, of each one pound: Extract of Hysop, white Sugar Candy, of each half a pound: Lac Sulphuris, Crystals of Nitre (made by dissolution in Spirit of Nitre) of each a quarter of a pound: sugared Crystal Mineral, Ginger in subtle Powder, of each two ounces: Oyl of Cloves, an ounce: Oyl of Sweet Fennel Seeds, half an ounce: with glair of Eggs, a sufficient quantity, make a mass, which form into little Pills, Rouls or Lozenges, according to Art, and so dry them.

II. This is a Medicine very pleasant, and therefore to be held in the Mouth to dissolve by degrees, that it may leisurely distil down the Throat. It is a specifick in Coughs, Colds, Asthmas, Whesings, shortness of Breath, difficulty of Breathing, &c. and gives wonderful ease to admiration.

III. It dissolves congeled Flegm in the Thorax, takes away the tickling in the Aspera Arteria, heals rawness and soreness of the Lungs, Breast and Stomach, and is an admirable thing in all obstructions or stoppages of the Breast and Lungs, causing easie expectoration...

X. It may be taken freely, and be held in the mouth all the day long (and all the night too) if the need requires...Price six pence an ounce.”

Hannah Woolley, Accomplish'd Ladies Delight in Preserving, Physick, Beautifying, and Cookery (London: printed for Benjamin Harris), 5th edition, 1685

“To make a Syrup for a cough of the Lungs” (p.30): “Take a Pottle⁶ of fair running water in a new Pipkin, and put into it half an ounce of Sydrack, half an ounce of Maiden-hair, and a good handful of Elecampane Roots sliced, boyl altogether, until half be boyled away even to Syrup, then put into it the whites of Eggs, and let it boyl two or three walms,⁷ and give the Patient a spoonful Morning and Evening.”

“For a dry Cough” (p.69-70): “Take anniseed, Ash-seeds, and Violets, and beat them to powder, and stamp them, of each a like quantity, then boyl them together in fair water, till it grows thick, then put it up, and let the Patient take of it morning and evening.”

“For a Rheumatick Cough or Cold” (p.79): “Take a pint of Hysop-water, Syrup of Gillyflowers, Syrup of vinegar, Syrup of Maiden-heair, Syrup of Colts-foot of each one Ounce, mingle them all together, and drink it when you please.”

“To make the Gascoign Powder” (p.80): Wooley doesn’t say what this powder is for (and it does not include Gascoign wine like the remedy below), but she does give the useful advice to “dry your Lozenges in the Air, not by fire nor Sun.”

“Dr. Stephen’s Sovereign Water” (p.81): “Take a gallon of good Gascoign wine, then take Ginger, Gilingale, Cancel, Nutmeg, Grains, Cloves, Anni-seeds, Carraway seeds, of each a dram; then take Sage, Mints, red Roses, Thyme, Pellitory, Rosemary, wild Thyme, Camomile, lavender, of each a handful, then bray⁸ both spices and Herbs, and put them all into the Wine, and let them stand for twelve hours, divers times stirring them, then distil in an Alimbeck, but keep that which you distil first by it self, for that is the best, but the other is good also, but not so good as the first.” Wooley goes on to list a number of ailments that this drink helps, and says that “it cureth the old Cough.”

Eighteenth Century:

William Woodville, M.D., Medical Botany (London: James Phillips), 3 vols., 1790

(Note: The quotations below are just a small portion of the plant descriptions, which are accompanied by beautiful full-plate, hand-colored etchings of each plant.)

Black Currant (Vol. II, p.210). *Ribes nigrum / Black Currant: “these berries are also said to be peculiarly useful in sore throats...”*

Coltsfoot (Vol. I, pp.37-38). *Tussilago farfara / Coltsfoot: “The leaves have always been of great fame, as possessing demulcent and pectoral virtues; of course, it is esteemed useful in pulmonary consumptions, coughs, asthmas, and in various catarrhal symptoms. It may be used as tea, or given in the way of infusion, to which liquorice-root or honey, may be a useful addition.”*

Elecampane (Vol II, p.299). *Inula helenium / Common Inula, or, Elecampane: “from its sensible and chemical qualities it promises to be a medicine of some efficacy; but in the diseases in which it is principally recommended, as dyspepsia, pulmonary affections, and uterine obstructions, we have no satisfactory evidence of its medical powers.”*

Gum-Arabic (Vol. II, p.189). Arabicum (gummi) / *Mimosa nilotica / Egyptian Mimosa / Acacia / Egyptian Thorn): “The glutinous quality of gum Arabic is preferred to most other gums and mucilaginous substances as a demulcent, in coughs, hoarsenesses, and other catarrhal affections, in order to obtund irritating acrimonious humours, and to supply the loss of abraded mucus. This gum is an ingredient in the Hartshorn decoction, the chalk Julep, the common emulsion, and some of the troches as directed in our Pharmacopoeias.”*

Horehound (Vol. II, pp.266-267). *Marrubrum vulgare / Common White Horehound: “A footnote indicates that Dioscorides and Pliny mentioned it in their writings, and Woodville refers to “the ancients,” “by whom it is greatly extolled for its efficacy in removing obstructions of the lungs, and other viscera. It has chiefly been employed in humoural asthmas, obstinate coughs, and pulmonary consumptions...That horehound possesses some share of medicinal power may be inferred from its sensible qualities, but*

its virtues do not appear to be clearly ascertained, and the character it formerly obtained is so far depreciated, that it is now rarely prescribed by physicians.” In reference to one of the methods of dosage, that of an infusion of half a handful of the fresh leaves, Woodville says: “This last mode is usually practiced by the common people, with whom it is still a favourite remedy in coughs and asthmas.”

Hyssop (Vol. I p. 182). *Hyssopus officinalis* / *Common Hyssop*: “First cultivated in England by Gerard in 1596, and is now extremely common in our gardens...it is chiefly employed as a pectoral, and has been long thought an useful medicine in humeral asthmas, coughs, & catarrhal affections; for this purpose, an infusion of the leaves, sweetened with honey or sugar, and drank as tea, is recommended by Lewis.”

Liquorice (Vol. III, p. 459). *Glycyrrhiza glabra* / *Common Liquorice*: “...it is now planted by many gardeners in the vicinity of London, by whom the metropolis is supplied with the roots, which, after three years growth, are dug up for use, and are found to be in no respects inferior for medical purposes to those produced in their native climate... “It is in common use as a pectoral and emollient in catarrhal defluctions on the breast, coughs, hoarsenesses, &c.”

Marsh-Mallow (Vol. I, pp. 147-148). *Althaea officinalis* / *Marsh-Mallow*: “Seems to have been known to the ancients and has continued in very general officinal use by practitioners in every country where the science of medicine is regularly cultivated. The gluten or mucilaginous matter is the medicinal part of the plant, and is commonly employed for its emollient and demulcent qualities. Its use is recommended where the natural mucus of membranes becomes acrid or abraded...in tickling coughs...in hoarseness...now it is only directed in the form of a syrup.”

Maidenhair (Vol III, p. 566). *Asplenium trichomanes* / *Common Maidenhair, or Spleen-Wort*: “...supposed to promote the expectoration of tough phlegm. They are usually directed in effusion or decoction, with the addition of a little liquorice. A syrup prepared from them, though it has now no place in our pharmacopoeias, is frequently to be met with in our shops, both as prepared at home and imported from abroad.”

Opium (Vol. III, pp. 509). *Papaver somniferum* / *White Poppy*: “In like manner as opium is useful in moderating excretions, so as when the irritation occasions an increase of these excretions, which is attended with affections which irritate the whole system, opium becomes especially useful. Hence it becomes so generally useful in catarrhal affections, and the cough attending them; and probably it is this analogy that has brought the use of opium to be frequently employed in pneumonic inflammations.

It is possible that there may be cases of such inflammations wherein the opium may be more useful in taking off the cough, than hurtful by aggravating by the inflammatory state of the system; but I have hardly met with such cases; and even in the recent state of catarrhs from cold, I have found the early use of opium hurtful; and in cases of pneumonic inflammation, I have always found it to be very much so, if exhibited before the violence of the disease had been moderated by repeated blood-letting. When that has indeed been done, I have found the opium very useful in quieting the cough, and I have hardly ever found it hurtful by stopping the expectoration.” He then explains that the opium suspends the expectoration for some hours, but if the glands are relaxed by

bleeding and blistering, the mucus that comes back is milder, with more relief to the lungs.

Squill (Vol.II, p.325). *Scilla maritima / Officinal Squill, or, Sea Onion*: “As an expectorant, the Squill may be supposed not only to attenuate the mucus, and thus facilitate its ejection, but by stimulating the secretory organs and mucous follicles, to excite a more copious excretion of it from the lungs, and thereby lessen the congestion, upon which the difficulty of respiration generally depends. Therefore in all pulmonic affections, excepting only those of actual or violent inflammation, ulcer, and spasm, the Squill has been experienced to be a useful medicine. The officinal preparations of Squills are a conserve, dried Squills, a syrup, and vinegar, an oxymel, and pills.

(A footnote says: “We must not, however, miss to observe here, that the drying of the Squill is a business that requires much attention, as it may be readily over done, and thereby render the Squill entirely useless. This over drying in one way or other, happens more frequently than our apothecaries are aware of...”)

Early Nineteenth Century:

Mrs. [Hannah] Glasse, The Art of Cookery made Plain and Easy, which far excels any Thing of the Kind yet published (London: printed for J. Johnson, etc.), a new edition, 1803. Chapter XXVII, “Useful and valuable Family Receipts:”

“Lozenges for a Cold” (pp.385-86): “Take two pounds of common white loaf-sugar, beat it well in a mortar, dissolve six ounces of Spanish liquorice in a little warm water; one ounce of gum arabic dissolved likewise; add thereto a little oil of anise-seed; mix them well to a proper consistency, and cut them into small lozenges; let them lie in a ban-box⁹ on the top of an oven a considerable time to dry, shaking the box sometimes.”

“For a Hoarseness” (p.385): “Take two ounces of pennyroyal-water, the yolk of a new laid egg beaten, thirty drops of cochineal, twenty drops of oil of anise seed, mixed well and sweetened with white sugar candy. A large spoonful to be taken night and morning.”

Earlier, in Chapter XV “Directions for the Sick” (p.264), Mrs. Glasse starts off with a qualifier: “I do not pretend to meddle here in the Physical Way; but a few Directions for the Cook, or Nurse, I presume, will not be improper, to make such a Diet, &c. as the Doctor shall order.”

Elias Smith, Physician, The American Physician, and Family Assistant (Boston: B. True, Printer), 4th edition, 1837. In Part II, about preparing vegetable medicines for use:

“Vegetable cough powder” (pp. 114-115): “This powder is prepared in the following manner. Take of horehound, made fine and sifted, four ounces; one ounce of lobelia emetic; one ounce of cayenne pepper; elecampane root two ounces; one ounce of skunk cabbage; one ounce of valerian, and one ounce of thorough-wort, all pounded fine, and sifted through a fine sieve, and well mixed together, when it is fit for use. This powder is designed for the cure of any kind of cough, caused by cold, directly or indirectly...this will generally give relief in a few days. Directions: take an heaping tea spoonful of the powder in a tea cup, add one table spoonful of molasses to it. Stir it together, as you

would sulphur and molasses. For a grown person, take from two to four tea spoonsful at one time; particularly when in bed at night. Mix the same quantity for children, as for adults, give them only half as much at once. Should this powder cause vomiting, it will give the more relief, or do more good. This powder as given above directed, has saved many sick children from death.”

“Cough drops” (pp.115-116): “The cough drops are prepared as follows: Take one quart liquid emetic; one quart water; add four ounces elecampane made fine; two ounces skunk cabbage made fine; one pound honey; two ounces nerve powder. Shake them every day for ten days, then settle and pour off. Take from one to two tea spoonsful at night, and at any other time when the cough is trouble-some, or the most violent. For children it may be reduced by adding pennyroyal or mayweed tea.”

“Acid cough syrup” (pp.116-117): “Take of Sumac Berries one pound, elecampane root, four ounces; skunk cabbage root, one ounce; West India Cayenne, one ounce; vinegar one gallon. Boil these together until the strength is out of the berries and roots. Then pour off the liquor from the sediments, and add about three pounds of honey, and it is fit for use. Directions - To be taken from one tea spoonful to a table spoonful, several times in a day. Children or grown people, troubled with any kind of cough should take it whenever the cough is severe, by day or night. Children should take about half the quantity given to an adult.”

Dr. Smith goes on to relate the incident of his first preparation of this syrup for a man supposedly in the last stages of consumption. He recovered and was at the time of writing almost 70 years old. The syrup had since been much improved and the entry ends with Dr. Smith stating simply: “Try it.”

Dr. Smith promoted his remedies in a section (pp. viii and ix) titled: “Prices of Medicines, prepared by Elias Smith, and kept constantly for sale at No.140, Hanover Street, Boston.” In this listing, the above-mentioned Cough Powders cost 20 cents an ounce; the Cough Drops 12 _ cents an ounce; and the Acid Cough Mixture was the cheapest at 6 _ cents an ounce. (For a comparison to a few of the other items he sold, Hemlock Bark was 40 cents a pound, Dysentery Syrup was \$1.00 a bottle, and Syringes were \$1.00 each.)

Mid Nineteenth Century:

Horace Everett, graduate and member of the College of Pharmacy in the city of New York, **The Practical Adviser, or Compendium of Recipes for the Use of Druggists, Apothecaries, Perfumers, Confectioners, Patent Medicine Factors, and Dealers in Toilet and Fancy Articles** (N.Y.: George B. Maigne, Printer), 1844

In his preface (p.9), Horace Everett says he has prepared some of the most popular patent medicines over fifteen years in the course of business, and that the purpose of this publication is “to give plain, easy, and practical recipes and rules for forming those compounds which are in the most demand among the trade...” He goes on to say (p.10) that by following his recipes “large sums may be saved to those who have heretofore been in the constant habit of purchasing their perfumes and patent medicines;” and he concludes with the statement: “A great advantage will also accrue to them, arising from

the satisfaction in selling an article which the vender can recommend as he knows the composition of it."

Among his thirteen recipes under the category "Medicated Lozenges" are the following:

"Cough Lozenges" (p.28): Pulv. Ipecac, Opium and Squills, each 1 drachm; White Sugar, 3 oz.; Mucilage of Gum Tragacanth, sufficient to make a mass. Roll it out and cut with a lozenge cutter.

"Anise Lozenges" (p.29): Pulv. Sugar, 3 lbs; Umber, 3 drachms; Oil Anise, 50 drops. With Musilage Tragacanth form into Lozenges, or roll up into sticks like Bath Pipe.

"Black Currant Lozenges" (p.29): Pulv. Sugar, 3 lbs; Ext. Black Currants, 3 lbs., Tartaric Acid, 1 oz.; Pulv. Gum Arabic q.s. Mix, roll out, and when dry, cut into small square pieces.

"Peppermint Lozenges" (p.30): Pulv. Sugar, 12 lbs.; Oil Peppermint, 1 ounce; make up with Mucilage Tragacanth.

"Wistar's Cough Lozenges" (p.30): Rub well together 2 drachms Pulv. Opium and half an ounce of Tincture Tolu; then add 1 lb. Pulv. Sugar, and 5 ounces Pulv. Gum Arabic, and with a thick solution of Extract Liquorice, form into a mass, roll out and cut into Lozenges. Some factors add a few drops of Oil Anise or Caraway.

"Mons. Gereve's Expectorant Candy" (pp.30-31): Bruised Ipecac and Squills, each 1 drachm; Elecampane and Comfrey bruised, each 1 ounce; boil in 2 quarts of water, down to 1 quart, and form into a candy with sugar.

John C. Gunn, M.D., Gunn's New Domestic physician: or Home Book of Health...(Louisville, Ky.: Middleton, Strobridge, & Co.), 1860

Dr. Gunn's book is a mammoth work of over 1,000 pages. He includes a chapter called "Medical Flora, or Vegetable Materia Medica" (pp.731-886), which is a comprehensive alphabetical description of plants he uses in his recipes. This is followed (pp.887-924) by the chapter "Valuable Medical Compounds, and other useful recipes, with directions for preparing and using them." He actually has quite a number of recipes for various powders, pills, syrups, tinctures, and gargles for coughs, hoarseness, and sore throats--of which some representative selections are given below:

"Cough powders" (p.892): "Take common Rosin and Loaf Sugar, of each one ounce; Gum Arabic and Balsam of Tolu, of each half an ounce; reduce all to a fine powder, and triturate together in a mortar. Dose, from half a teaspoonful, with a sup of water three or four times a day, and on going to bed at night. One of the best cough remedies known."

"Cough syrup" (p.898): "Take Hoarhound herb, Elecampane root, Spikenard root, Ginseng root, Black Cohosh and Skunk Cabbage roots, of each say a good sized handful, bruise, and cover with spirits or whisky, and let stand ten days; then put all in a suitable vessel, add about four quarts of water, and simmer slowly over a fire (but don't boil) for

twelve hours, or till reduced to three pints; then strain, and add one pint of strained honey, half a pint each of Number six, tincture Lobelia and tincture Bloodroot (the Vinegar or Acetic tincture of Bloodroot is best), and four ounces of strong essence of Anise, and you will have one of the best cough syrups known. Dose, a tablespoonful three to six times a day, according to circumstances. Good in all kinds of coughs and incipient consumption.”

“Soothing cough mixture” (p.898): “Take Mucilage of Gum Arabic, Oil of Sweet Almonds, Syrup of Balsum Tolu, and Wine of Ipecac, of each one ounce; tincture of Opium, or Laudanum, half an ounce. Dose for a grown person, one to two teaspoonfuls, as often as required.”

“For hoarseness” (899): “Take four ounces of grated fresh Horseradish, saturate it in a pint of good vinegar over night, then add half a pint of Honey, and bring it to the boiling point; then strain and squeeze out. Dose, one to two teaspoonfuls several times a day. Very good for hoarseness, loss of voice, and all ordinary coughs.”

“Gargle for sore mouth and throat” (p.902): “Take a small handful each of Sage and Privet leaves, about half as much Golden Seal root and Bark of Sumach root, boil in three or four pints of water down to one pint, strain, and add an even tablespoonful each of powdered alum and Borax, and about half a teacupful of honey. For quinsy, and sore throat from taking a cold, add a little Cayenne and Vinegar, and gargle frequently, occasionally swallowing a spoonful.”

“Another for same” (p.902): “Take of borax, powdered, one drachm, tincture of Myrrh half an ounce, Honey one ounce, Rose water, four ounces, mix. To be used frequently as a mouth wash and gargle for sore throat.”

“Decoction of Tar – Jew’s Beer” (p.906): “Take of Water three quarts, Wheat bran one quart, Tar one pint, Honey half a pint. Simmer together three hours, and when cool add a pint of brewer’s yeast. Let it stand thirty-six hours, and then bottle it. Dose from one to two tablespoonfuls three or four times a day. Useful in consumption and other lung affections, attended with cough and copious raising.”

Late Nineteenth Century:

Sunbeams of Health and Temperance. (Battle Creek, Mich.: Good Health Publishing Company), 1889. No author given, but the copyright is for **J.H. Kellogg**. Chapter at the end of the book, “A Few Medical Suggestions”

“Hot Water for Sore Throats” (p.213): Quoting Dr. George R. Shepherd of Hartford, Conn. in the Medical Record: “I have used hot water as a gargle for the past six or eight years, having been led to do so from seeing its beneficial effects in gynecology.... To be of service, it should be used in considerable quantity (a half pint or a pint) at a time, and just as hot as the throat will tolerate. I believe it may be taken as an established fact that in the treatment of inflammations generally, and those of the mucous membranes in particular, moist heat is of service, and in most cases hot water is preferable to steam.”

Transitions into the Twentieth and Early Twenty-first Centuries:

Advertisements in Buffalo Bill's Wild West Brochure, 1907

The 1907 brochure has a small ad that says: “Luden’s Menthol Cough Drops, Give Instant Relief, Comply with the National Pure Food Law, Sold Nearly Everywhere, We Sell Them, Made by W.H. Luden, Reading, Pa.” Each side of the ad has a 5 cent sign. In contrast to this is a full-page ad later in the (unpaginated) brochure for “Smith Brothers Cough Drops” that not only has a picture of the box, but the trademark double portrait of the two brothers (William and Andrew) is depicted even larger at the top. At the bottom of the ad is the statement “On sale with this show.”

Luden’s cough drops were just one of the selections in W.H. Luden’s candy business that he established in 1879; in 1986, the Hershey’s company acquired it; but, sold it to the Pharmacia company in 2001.¹⁰ Interestingly, Ludens is one of six throat lozenges listed as Kosher (if it bears an OU or OU-D mark) on the website “Kashut.com: the premier Kosher information source on the internet.”¹¹ The origin of the Smith Brothers drops goes back even further. Their father started making the original licorice and anise “cough candy” in 1847 in Poughkeepsie, N.Y.; the cough drops are now an offering of F&F Foods of Chicago.¹²

The comparison/competition between these two major commercial cough drop brands is not just a phenomenon of the late nineteenth and twentieth centuries. An online web search on “Luden’s Cough Drops” and “Smith Brother’s Cough Drops” yielded over 400 hits on Ludens, but over 7,000 hits on the Smith Brothers! Many are commercial outlets selling the products (in their modern reincarnations) along with other pharmacy products; some are nostalgia sites selling the old boxes and advertisements; others are references from chat rooms and published works where people write about their memories or impressions of the cherry-flavored drops, or the image of the Smith Brothers with their beards. Both brands have, seemingly, become a part of American popular culture.

A trip to one of this writer’s local pharmacies revealed that it would be too big a project to compare all the modern ingredients with those of the past. There were 45 bags of over-the-counter cough drops/lozenges of various flavors made by a number of different companies, 18 more choices in small boxes, several sore throat sprays, 23 cough syrup variations for adults (the children’s section had more), plus another large section where coughs are treated as part of multiple symptom cold/flu remedies.

However, a few observations can be made. Among all these confusing choices, it was reassuring to see boxes of “Luden’s Wild Cherry” lozenges, which this writer also remembers from her childhood. (Other memories are the two home remedies that her Mother always made when anyone had a sore throat: “anise candy” and a froth of whipped egg whites, lemon juice, and sugar.) The active ingredient of the Ludens lozenges is listed as “Pectin (oral demulcent)”; the other ingredients are ascorbic acid, citric acid, FD&C Blue no.2, FD&C Red no. 40, flavors, malic acid, sodium acetate, sodium chloride, soybean oil, sucrose, and water.

The ones closest to the traditional recipes described in this article seemed to be the “herbal throat drops” by Ricola and Celestial Seasonings. The active ingredient is menthol in the three Ricola cough drop varieties looked at: the “Original Ricola natural

herb cough suppressant,” the “Natural honey-herb,” and the “Echinacea Honey-Lemon.” All have an herb mixture made up of elder, horehound, hyssop, lemon balm, linden flowers, peppermint, sage, thyme, and wild thyme; this extract is combined with honey, natural flavors, starch syrup and sugar. Slight differences are that the natural honey-herb drops and the echinacea drops also have mallow, whereas the original formula drops have angelica root instead. The Swiss company’s statement on the bags reads: “For over 70 years, Ricola has been making pleasant tasting natural herbal products for natural relief of the discomfort due to sore throat and minor irritation due to coughs, hoarseness, dry throat, and loss of voice. Ricola is nature’s way of calming coughs and soothing sore throats.”

The ingredients in the Celestial Seasonings “Honey-Lemon Chamomile” drops are menthol and pectin as the active ingredients, with chamomile flower extract, citric acid, corn syrup, honey, lemon juice, natural flavoring, oils of angelica root, anise star, ginger, lemon grass, sage, white thyme, sucrose, and tea extract. Their promotional statement states: “You can trust that a throat drop from Celestial Seasonings, the maker of America’s number one herbal teas, will be the perfect comfort for your sore throat.” They go on to note that the soothing properties of their selected natural ingredients have been relied on for centuries.

Conclusion:

The world’s largest drugmaker, Pfizer, Inc. took over Pharmacia Corp. in 2003. A write-up on the Federal Trade Commission’s website includes the following article excerpt from April 14 of that year: “Annual sales of cough drops in the United States are about \$240 million. Pfizer, with its Halls Brand and Pharmacia, with its Ludens brand, are the only two significant competitors. The loss of Pharmacia as an independent competitor in the OTC cough drop market is likely to lead to higher prices for consumers, the FTC alleges.”¹³

Our twenty-first century cough drops and throat lozenges involve less human labor and time in their manufacture, and offer improved drugs and a great variety of options. Yet, as we can see in this sampling of remedies from old books, some of the ingredients remain the time-tested ones that our ancestors used: including horehound, licorice, hyssop, sage, anise, mallow, ginger, thyme, lemon, chamomile, peppermint, and the ever-comforting honey and sugar.

Notes

1. *Elias Smith, The American Physician and Family Assistant (Boston: B. True, Printer), 1837, 4th edition, p.162 (under the category of “Cold,” in part III on “Diseases and the manner of curing them with vegetable medicine”).*
2. *Loc.cit*
3. A.C. Wootton, *Chronicles of Pharmacy* (Tuckahoe, N.Y.: USV Pharmaceutical Corp.), 1972), pp.89-90.
4. *Oxford English Dictionary, being a corrected re-issue...* (Oxford: Clarendon Press), 13 volumes, 1933; 1978 reprint.
5. *Ibid.* Gervaise Markham’s “powder of Shervit” might be the OEDs “Sherbet powder,” defined as a preparation of bicarbonate of soda, tartaric acid, sugar, and various flavors for making an effervescing drink. Searches on the word shervit in seventeenth and

eighteenth century dictionaries did not turn up anything; the closest word seems to be sherbet: defined as a mix of water, lemons, and sugar in N. Bailey, *An Universal Etymological English Dictionary* (London: printed for R. Ware, etc.), 1747.

6. Ibid., "pottle:" a measure of capacity equal to two quarts, now abolished; also, a pot or vessel containing a pottle.

7. Ibid., "walm:" to well up, gush, or spout forth

8. Ibid., "bray:" to bruise, pound, crush to powder, usually in a mortar

9. Ibid., Hannah Glasse's "ban-box" is probably a phonetic reference to the "band-box" defined in the OED as a slight box of card-board or very thin chip covered with paper, for collars, caps, hats, and millinery; originally made for the "bands" or ruffs of the 17th century.

10. <http://www.hersheys.com/products/ludens.shtml>

11. http://www.kashrut.com/articles/medicine_list

12. http://cityguide.pojonews.com/fe/Heritage/stories/he_smith_brothers.asp

13. <http://www.ftc.gov/opa/2003/04/pfizer.htm>

Announcements

Health and Medicine in North America in the Era of Lewis and Clark November 4-6, 2004, Philadelphia, PA.

The Francis C. Wood Institute of the College of Physicians of Philadelphia is planning a major conference on medicine in the U.S. circa 1800, to be held Thursday evening through Saturday, November 4, 5, and 6, 2004. Co sponsors will include the American Philosophical Society, the Library Company of Philadelphia, and the McNeil Center for Early American Studies at the University of Pennsylvania. The conference is timed to coincide with the opening of a national touring exhibition on the Lewis and Clark expedition at Philadelphia's Academy of Natural Sciences. Another exhibit, "Only One Man Died: Medical Adventures on the Lewis and Clark Trail" is currently on display at the College of Physicians and will remain there through 2006.

Requests for further information should be directed to:

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International Congress on the History of Pharmacy June 22-25, 2005, Edinburgh, Scotland

The biennial International Congress on the History of Pharmacy, scheduled for June 22 to 25, 2005, will be held in Edinburgh, Scotland. It is being organized by the British Society for the History of Pharmacy (www.bsph.org), under the aegis of the International

Society for the History of Pharmacy. For registration forms and information, contact the Local Secretary, Peter Homan (peter.homan@lineone.net).

**International Congress of History of Science
July 24-30, 2005, Beijing, China**

The next International Congress of History of Science will convene 24-30 July 2005 in Beijing, China. The central theme will be "Globalization and Diversity," focusing historically on cross-cultural diffusion of science and technology, and its impact on the world today. The program includes plenary lectures, symposia, poster sessions, and volunteer papers in three sections, one of which is devoted to medical history, broadly defined. The Congress website is: <http://2005bj.ihns.ac.cn>. To e-mail the Congress Secretariat address: 2005bj@ihns.ac.cn.