
Exploring Unconventional Medical Systems

Frank L. Tabrah MD

Abstract

Exotic medical systems still exist in the world's developing areas. These systems often embrace a unique pharmacopoeia and remarkable human relationships. Here is a guide for your personal exploration and appreciation of health care systems unfamiliar to Western medicine. It has been developed from personal use, offering practical suggestions for the study of unusual medical beliefs and practice in the field—and it can be used, closer to home, to survey disease and treatment concepts found in alternative or complementary medicine.

Exploring Unconventional Medical Systems

Renewed fascination with medical skills little known to Western medicine has sparked new interest in medical history, unusual medicinals, and the treatment arts of a myriad of peoples. The indigenous medical practices of Pacific cultures richly share this interest.

Although the content of many of the ancient pharmacopoeia-herbs, minerals, and materials from the sea have been sporadically investigated in past years, the development of new natural product screening techniques, and academic interest in alternative medicine should join forces to renew attention to the complex chemistry of plant and marine life, and unfamiliar approaches to treatment of disease. Therapeutic syntheses may well exist between natural products use, physical treatment, placebo effects, and psychosomatic interventions.¹

In considering today's possibility of new and more powerful assays of worldwide native medicinals, in islands materials, the apparent paucity of dramatic chemical effects found in past screening of indigenous Pacific island plants should be noted. Highly valuable but subtle effects may well have been missed using the classic Hippocratic screen.

Generally, physiologically active plant or animal derived agents with few exceptions such as vinca alkaloids, steroids, and antibiotics are related to highly toxic plant or animal substances produced as

defense against a hostile world of surrounding predators. How benign the native Hawaiian flora and fauna appear when compared, for example, with the vast array of South American jungle life where highly toxic plant and animal compounds abound, which in small doses may be therapeutic. Considering Hawaii's relatively non-toxic indigenous pharmacopoeia, it appears that at least some of the traditional use here of plant materials may have had strong psychosomatic effects supplementing their chemical activity.^{2,3,4}

With modern screening techniques done by automated high-throughput equipment using scores of assays based on whole cells, purified enzymes, and the activity of receptors or ion channels,^{5,6} many useful compounds may yet be found on rescreening these non-toxic indigenous plant materials. Through combinatorial chemistry ethnobotanic leads can be a shortcut to novel active compounds— as many as 40,000 in a single experiment. And certainly a full scale systematic "attack" on the chemistry of marine creatures should continue, even without known ancient clinical applications.^{7,8}

Beyond further review of Pacific islands pharmacology, there still lies the world-wide challenge of thousands of plant, insect, and animal sources of possibly useful compounds to be found. And beyond pharmacology- and to us, rational therapeutics, there is the whole range of little understood native practices of massage, incantation, song and dance therapy, meditation, and other elements that might well be included in Dr. David Eisenberg's definition of "unconventional therapies" as "commonly used interventions neither taught widely in U. S. medical schools nor generally available in U. S. hospitals."⁹

For medical personnel, physicians, nurses, Public Health workers- anyone with a clinical background working for long periods in remote areas, the chance to survey an indigenous medical system first hand is an opportunity not to be missed. Preparation is critical. One should accumulate as much knowledge of the area and culture as possible before travel; it may help you to appreciate otherwise incomprehensible information. What you find may be unique.

With appropriate apologies to dedicated ethnobotanists and pharmacognists who are in remarkably short supply, this outline is presented as a clinician's approach to understanding the customary medical practices of any indigenous group. It is to be used simply as a means to establish closer medical contact with a host society, and in no way should it minimize the role of the professionally trained ethnobotanist in the field, whose investigations sometimes take years, and whose unusual pharmaceutical contacts can quickly facilitate natural products research, as well as insure the interest of the indigenous peoples and their informants. Several landmark publications provide rich insight into the integrated roles of medical personnel, drug development companies such as Shaman Pharma-

Correspondence to:
Frank L. Tabrah, M.D.
Dept. of Physiology
UH School of Medicine
Straub Clinic and Hospital, Inc
888 South King St
Honolulu, HI 96813

ceuticals, ethnobotanists, local healers, patient populations, and their governments. Particularly well noted is the need for safeguards against cultural and economic exploitation.^{10,11,12,13}

Throughout history, fascinating unexpected drug knowledge and skills have been found by explorers, traders and travelers, linking the distant past and the geographically remote while playing their parts in early biochemistry. Sixteenth century Spanish explorers found the hunters of the Orinoco using vegetable poison on arrow heads. It was 1865 before the sources of this poison—a tropical vine—was tested in a laboratory. It contained, of course, the alkaloid curare, and years of modern use attest to its relaxation of muscles during surgery.

A classic tale of a local medical belief finding its way into modern medicine is the story of foxglove. While for hundreds of years rural savants used foxglove as a household remedy, learned physicians held it in contempt. William Withering, some two hundred years ago, as a young physician, had the wit to seek out an old Shropshire woman who had a reputation in the neighborhood for curing dropsy—her foxglove, containing our modern digitalis, was known (seemingly only to peasants) as early as the tenth century!¹⁴

What we call rauwolfia has been known since Vedic times as a potent medication in India. A French botanist named the plant in the early 17th century after which it was promptly forgotten. Vague rumors suggested, occasionally, its value for treating “madmen”. In 1931, 1933, and finally in 1949, attention of the Western world focused on this useful hypotensive and sedative—thousands of years from its discovery.¹⁵

One can, with insight and a modest professional approach, elicit and record medical beliefs, disease patterns, and treatment methods from people who have active local medical systems. Medical personnel with their special, usually invited, relationships with health care personnel in developing areas, are in a unique position to exchange the fundamental ideas of therapy that contribute to the excitement and satisfaction of weighing exotic clinical hints, bizarre as they may be, anecdotal, vague, but THERE—on the fragile fringe of statistical rigor.

Here is the essence of a brief therapeutic field quest. It is a basic outline of inquiry, suitable for use in remote areas by those who wish to gather information about the primary health concerns of a community, how perceived disease is managed, and whether there are any local medicinal uses of available plant, animal, or other materials, or other healing methods in use.

Although length of stay and reasons for being in a developing country may vary, the expression of genuine interest of an “outside” physician or other health professional in the local medical system is usually enough to insure cooperation from elders and informants. Proper introduction should be sought through “Western trained” health care personnel, if available, whose practices often involve native healers.

A suggestion from a medically trained person that one would much appreciate talking with a knowledgeable informant (with interpreter if needed) with whom one might discuss health related matters, generally produces a local practitioner or older family member well versed in local medical knowledge. This approach usually brings a positive response, reflecting confidence and pride in prevalent medical skills.

On the need for an interpreter, this quotation is from Bruce Briggs,

a noted anthropologist—“If you want to understand fully the ideas of sickness and health that underlie your healer’s practices, his categories of disease, and the specialist vocabulary of his profession, you must work in his language, not yours, because while you may, eventually, get to understand what he tells you in his language, and translate it into something that can be compared with western ideas on the same topic, there is no way that your informant, perfect though his English may be, can do that for you. His very use of English will mask and obscure your topic of investigation”¹⁶

To begin, expression of an interest in exchanging medical care information usually carries one beyond the awkward early points of discussion—here it is important to actually have something to share, some knowledge of the local botany or health beliefs, knowledge of a recognizable medicinal plant, local disease names—anything of common interest for the opening conversation—here your pre-travel research of an area or culture is essential.

Since it is difficult to predict where the discussion will flow, much time and interesting information may be lost without an organized approach. Discussion can be focused by simply asking some questions in language appropriate to the setting (for example, one would not ask a non-Western trained person about anesthetics or analgesics, but about things that stop pain).

Opening Questions

Since childhood disease and death are the most devastating problems in many underdeveloped areas, open the conversation by talking of these, then going on to other age groups and subjects.

1. Diseases of infants
Diseases of children
Diseases of teenagers
Diseases of adults
Diseases of old people
2. Communicable diseases (if this concept is present- and how it is thought they are transmitted).
3. Traumatic disorders (sprains, fractures, lacerations, and other surgical problems)—talk of treatments and results, wound closure and splinting, if done.
4. Poisonings:
contact
bites
stings
ingested- plant parts, or other materials
5. Most common diseases: Disease names, symptoms, how treated.
short term
long term
fatal
6. Women’s diseases and birth complications
7. Men’s diseases

8. Psychologically induced diseases (cultural equivalents of hexing beliefs, juju, ana ana, "kahuna" practices, etc.).

Clarification of points in this listing should be made in simple language. For example, in inquiring about communicable diseases, it is helpful to ask what diseases the people think they might "catch" from one another, or from animals, water supplies, etc. In Item 8 above, the psychiatric disorders in the community—a wide range of causative agents and beliefs may surface, although there is often reticence in discussing "voodoo", hex, or other threatening psychosuggestive practices. Although these may be denied by the informant, a useful approach is to ask that if these things were to happen, what would be the remedy.

In Fig. 1 a Nigerian infant has been painted with black circles to offset disease and misfortune—more accurately, parasitism, infection and malnutrition. With up to a 50% infant mortality rate in the first year, talks with mothers and local healers about the circles and other preventive measures provided openings for exchange of information about nutrition, bacterial disease and parasite transmission.

Early in a promising discussion it is good to get a basic idea of the range of the informant's diagnostic knowledge and understanding of disease by producing a few blank anatomic sketches of the body, and asking for the names of body parts and the names of diseases for each part, with a brief description of their appearances or effects. From

this the names of many common diseases in the local dialect can be obtained—often a good informant has sufficient medical knowledge outside of his own system to accurately identify these diseases in more common terms. Sketches from Wagner and Rullo, Medical Guide and Glossary should be useful, Fig. 2., as well as the showing of illustrations that you may have on hand.

Since the exchanges with a good informant can be very intense, subjects to be covered by this outline are best considered during many interviews, allowing "thinking time" for both the informant and one's self. Additional conversation about other matters and the chance to talk of non-medical subjects such as fishing, climate, boats, etc., usually enhances friendships and eases the exchange of medical information.

After several conversations, enhanced by interactive skill and interest, you will probably have a fair idea of the indigenous medical scene. Think carefully about ideas inviting further inquiry. Most informants will graciously provide plant specimens for alkaloid testing in the field, or for later laboratory assay. Plant specimens can be roughly screened with one or two hundred grams of plant parts, which is about two handfuls. Thoroughly dried plant material can be safely transported or mailed for basic evaluation and a pressed reference specimen is essential.

Figure 1.—Nigerian infant with painted circles to ward off disease.

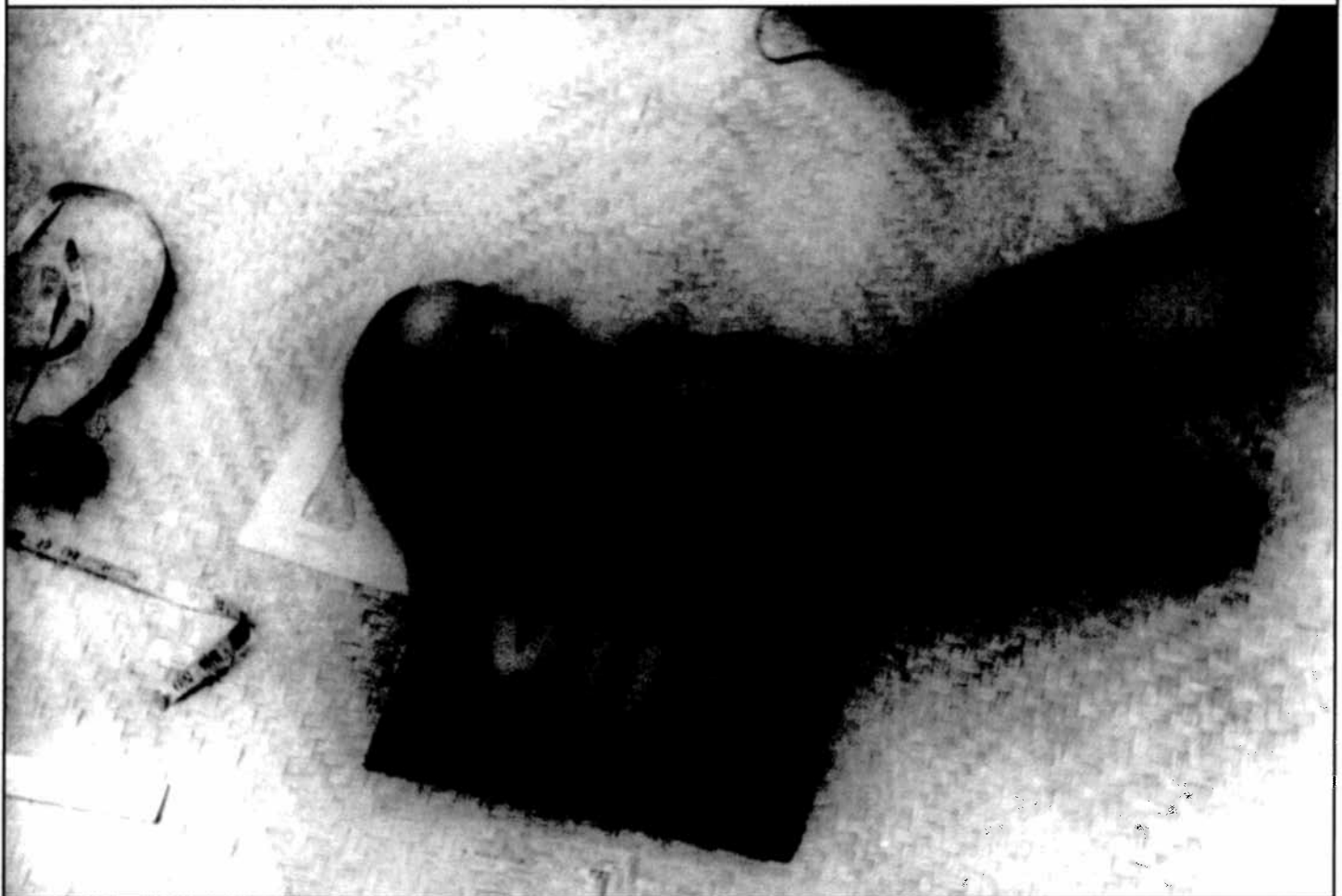
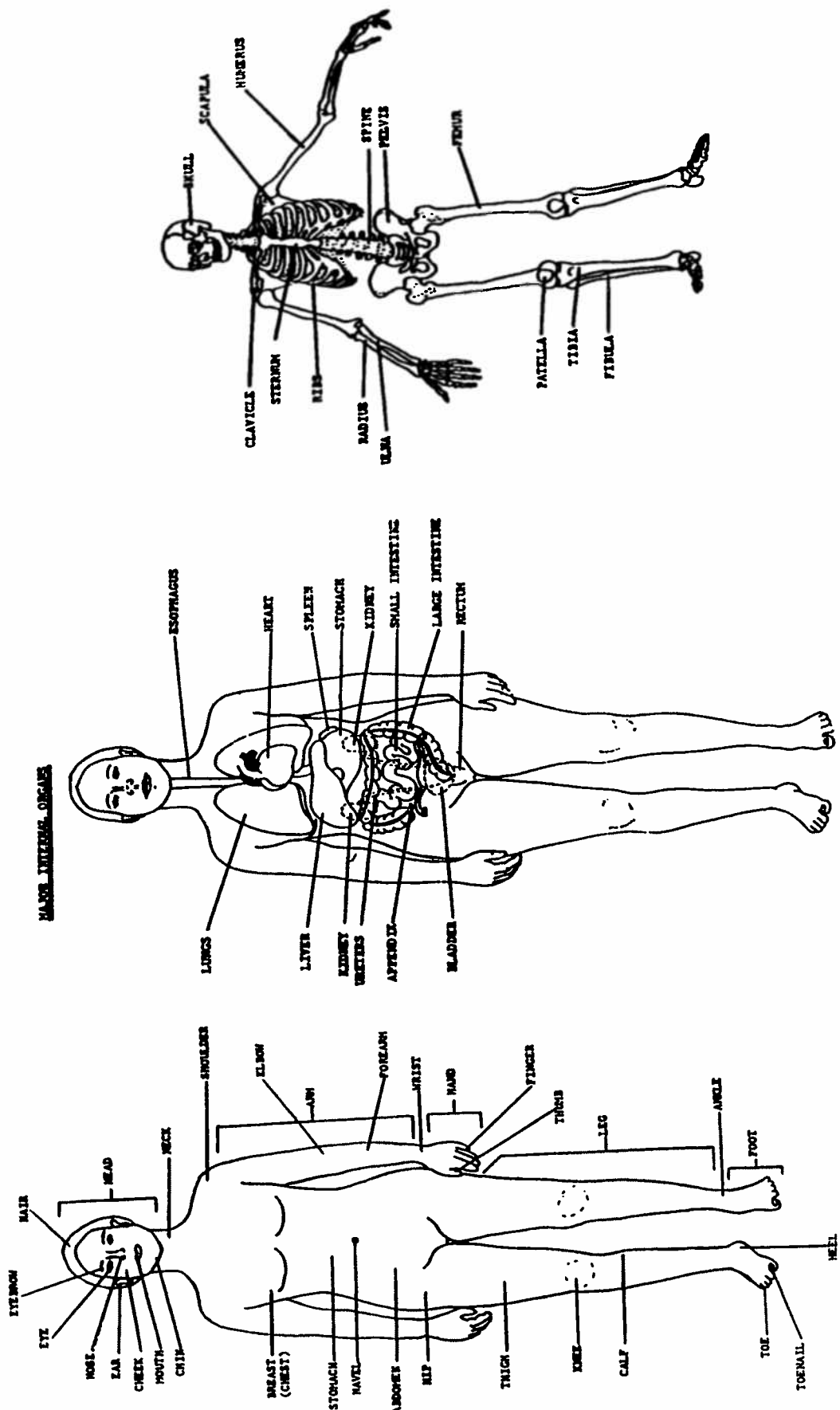


Figure 2.— Diagram for use of informants when discussing diseases and medications.



For a more focussed drug search, the following relatively simple questions will search out beliefs or facts suggesting the possible presence of several sorts of pharmacological activity. Ask what local medicines might do to alleviate the disease states you have already discussed, and what works particularly well. Most informants understand groups of remedies, so try asking in very simple terms about these:

1. Fungicides- local or systemic (possible viricides)

A common body of knowledge about treatment of chronic itching or scaling skin disorders usually includes application of several plant juices, soaks, or poultices. Of course, without an exact diagnosis with fungus cultures and other more accurate data, the existence of fungicides cannot be assured, but if you find effective measures against chronic skin lesions in the tropics, some assays might be rewarding. Natural fungicides are known—one appears to exist in the protective mucus with which the centipede coats its eggs exposed in the damp earth to destructive fungi.¹⁷ King and Tempesta reported in 1994 that over half of the plants used for native antifungicides also showed strong antiviral activity in vitro.¹⁸

One compound from the Samoan pharmacopoeia (prostratin, 12 deoxy phorbol 13-acetate) was found at NCI to prevent HIV-1 reproduction in lymphocytic and monocytoid target cells, and fully protected human cells from lytic effects of HIV-1.¹⁹ The possibility of potent viricidal activity in native flora, although difficult to assess clinically, should not be ignored.

2. Anti-fertility agents - systemic or intravaginal

Many cultures have reputed means of reducing fertility. Egyptians (1500BC) used lactic acid-producing tampons of acacia and honey, or highly alkaline crocodile dung;²⁰ prolonged breast feeding is, of course, a common practice, and it is quite possible that gravidolytics or substances that affect ovulation, implantation, or embryonic survival may exist in native pharmacopoeia. Questions about what can be taken by mouth to prevent or terminate pregnancy often elicit remarkable replies, both cultural and pharmacologic.

3. Uterine contractants or relaxants

Substances or practices that have effects on the menstrual cycle or on the contractions of labor are often mentioned by practitioners. These merit close attention.

4. Hormones

In view of the plethora of phytoestrogens and steroid precursors in many flora, inquiry should include uses of materials believed to affect growth and development, sexual characteristics, libido, hair growth, menstruation, production or suppression of goiter, and changes in body weight.

5. Anodynes - local or systemic

Although most indigenous medical systems are not as concerned with pain relief as we in Western medicine are, questions about agents which will relieve pain, either of disease or injury, may elicit information of great pharmacological value, if followed by laboratory investigation.

6. Anesthetics - local or systemic

Worldwide, the most common anaesthetic is a large dose of alcohol, produced by fermentation (attesting to man's vast ingenuity) of an incredible array of carbohydrate-rich plant materials. Medicinal effects of plant "tinctures" or other combinations of materials with alcohol must be considered with their alcohol content in mind. (Lydia Pinkham's celebrated vegetable compound contained 73 percent ethanol, but little else pharmacologically).

7. Steroids or salicylates

Effective long term agents against pain and disability of arthritis might suggest the presence of either or both of these groups of compounds, although their effects on pain alone would likely be masked by anodynes.

8. Antibiotics - local or systemic

Reports of effective treatment for disease of bacterial origin might suggest antibacterial action. Again, it must be understood that this is a superficial screen for information, and that cultures and laboratory tests of collected material might negate much of one's most promising ethnic information. This was true of the local use of laukahi (*Plantago major*) for skin infections which showed no effect in culture when tested for antibacterial activity. However, each usage should be investigated, if possible—Milkweed fibers packed into an open wound dependably stimulate healing without infection, and slough in a few days with dried serum and detritus, according to an African Yoruba healer. (Fig 3.) Antibacterial activity? Possibly.

Figure 3.— Plant fibers packed into open wound- later slough of the fiber pack leaves a clean, granulating wound. (Awo Omamma, Nigeria).



9. Clotting and anticlotting agents

Inquiry about agents that might affect bleeding in wounds should be made for identification of possible substances speeding, slowing, or stopping clotting. One Pacific Islands plant, now under study, contains an unusual anticlotting agent, found unexpectedly in its leaves. Unexpectedly, in that the leaves were used by the Hawaiians in wounds to stop bleeding, probably a simple foreign body effect like the classical European spider web treatment for cuts.

10. Toxic agents of any sort

Since highly toxic materials are usually well known to an indigenous population, this is a very important element in this survey.

As previously mentioned, it is a fundamental principle in pharmacology that many medicinal materials in large doses are poisons, and conversely, many poisons in small doses happen to be useful medicines, the effects varying widely with dosage. Toxic plant materials in the form of chewed leaves, teas, consumed fruits or seeds, recognized poisonous animals, marine forms, insects and arthropods, should be carefully noted and screened if the basic toxicology is unknown.

11. Antitumor agents

Some basic questions to weigh the informant's comprehension or recognition of cancer is important. Unless there is some understanding of malignancy, questioning about treatment is of course, futile. More sophisticated indigenous medical knowledge often includes attempts at cancer therapy which should be at least discussed—something may be there. In 1968, *Lanice conchilega*, a local clam worm, was reported to the author as effective against cancer if cooked and eaten. Alcohol-water extracts were found to be 100% effective against Erlich ascites cell tumor in mice, but activity in the wider NIH tumor screen then in use was below the cut for further trials.²¹

12. Vermifuges

Knowledge of vermifuges, or worm medicines, is fairly common in primitive cultural medical systems, although many areas scarcely consider parasitism as a problem. Questioning here is simple—one talks of internal worms, then an inquiry of "what will bring them out" may produce one or two favorite treatments.

13. Psychodynamic compounds

Materials altering mental or neuromuscular function may be found by close questioning about medicinally induced excitement, dizziness, visions, altered sleep, speech, or gait. For example, the ubiquitous knowledge of Pacific islanders that drinking of kava (*Piper methysticum*) in sufficient doses will tranquilize and cause temporary paralysis of major muscle groups²² has led to its appearance on the shelves of the corner health food store.

Important information in more developed areas will often be found as extensive lists of recipes, or descriptions of how local plants should be gathered and prepared for medicinal use. Such material is often found in handwritten recipes in ledger books, on sheets or end pages of family Bibles in prosylatized countries, or even in typewritten form. Although written material of this sort is usually highly prized and carefully guarded, it is my experience that its owner will graciously allow one to photograph it by simply laying it on any suitable flat surface, and copying the pages with a hand held camera.

With the plan outlined above, and particularly with the good fortune of access to written material in more developed countries, you may experience a surprisingly inclusive overview of the medicinal and therapeutic activities of an area. Beyond sharing health care information, this approach can afford great intellectual pleasure and the exchanged information will almost certainly enrich both you and your informants. A revealing talk with an Igbo Medicine man (Fig 4.) about fees brought out this ancient gem:

At the height of the fever
One promises a goat—
On recovery
A chicken will suffice.

Lasting friendships and opportunities for new cross-cultural understandings will thrive on your search for cures little known to Western medicine.

Figure 4.— Igbo healer, in his treatment facility. Services include medicinals, incantations, spells, and predictions of the future.



Finally, keep in mind that your search, even if kept quite simple can be very important. Despite the long history of chemical and physiologic investigation of culturally interesting materials, plant, animal, insect, arthropod, and marine, new screening methods of incredible sensitivity and speed offer a major research opportunity for what you might find.

Remember, clinical medicine is still among the most ancient and mysterious of the arts. Although outcomes research, evidence based medicine, and the statistical luxury of double blind studies have scarcely touched most unconventional medical systems—look and listen when you can. Something may be there. But beware of the siren song of novelty—only evidence based knowledge can truly inform our art.

Good luck!

Continued on p.190

Continued from previous page

Group randomizing high risk Stage I patients to postoperative radiation versus systemic chemotherapy. The results of this trial should yield valuable information regarding the adjuvant treatment of high risk patients.

In summary, the surgical staging of endometrial cancer provides vital information with regard to the extent of cancer and ultimate prognosis. When cancer is confined to the uterine corpus histopathologic findings can be used to stratify patients into high risk and low risk groups. Postoperative therapy can then be tailored to the individual patient.

References

- Carey M.S., O'Connell G.J., Johanson C. R., et. al., Good Outcome Associated With a Standardized Treatment Protocol Using Selective Postoperative Radiation in Patients with Clinical Stage I Adenocarcinoma of the Endometrium, *Gynecologic Oncology* 57, 138-144 (1995).
- Kadar N., Malfetano J.H., Homesley H.D., Determinants of Survival of Surgically Staged Patients With Endometrial Carcinoma Histologically Confined to the Uterus: Implications for Therapy, *Obstet Gynecol* 80, 655-659 (1992).
- Piver M., Hempling R., A Prospective Trial of Postoperative Vaginal Radium/Cesium for Grade 1-2 Less Than 50% myometrial Invasion and Pelvic Radiation for Grade 3 or Deep Myometrial Invasion in Surgical Stage I Endometrial Adenocarcinoma, *Cancer* 66, 1133-1138 (1990).
- Kucera H., Vavra N., Weghampt K., Benefit of External Irradiation in Pathologic Stage I Endometrial Carcinoma: A Prospective Clinical Trial of 605 patients Who Received Postoperative Vaginal Irradiation and Additional Pelvic Irradiation in the Presence of Unfavorable Prognostic Factors, *Gynecologic Oncology* 38, 99-104 (1990).
- Elliot P., GreenD., The Efficacy of Postoperative Vaginal Irradiation in Preventing Vaginal Recurrence in Endometrial Cancer, *Int J Gynecol Cancer* 4, 84-93 (1994).
- Ackeman I., Malone S., Thomas G., et. al., Endometrial Carcinoma - Relative Effectiveness of Adjuvant Irradiation versus Therapy Reserved for Relapse, *Gynecologic Oncology* 60, 177-183 (1996).
- Chen S., Operative Treatment of Stage I Endometrial Carcinoma With Deep Myometrial Invasion and/or Grade 3 Tumor Surgically Limited to the Corpus Uteri, *Cancer* 63, 1843-1845 (1989).
- Fanning J., Nanavati P.J., Hilgers R.D., Surgical Staging and High Dose Rate Brachytherapy for Endometrial Cancer: Limiting External Radiotherapy to Node-Positive Tumors, *Obstet Gynecol* 87, 1041-1044 (1996).
- Aalders J., Abeler V., Kolstad P., Postoperative External Irradiation and Prognostic Parameters in Stage I Endometrial Carcinoma, *Obstet Gynecol* 56, 419-426 (1980).

Continued from p.185

Acknowledgement

The author expresses appreciation to the many informants who over the years have contributed information or supported medicinal surveys, particularly Heloke Mookini, Ida Lum, John Solomon, the Pule family, Monty Richards, Dr. Barton Eveleth, Dr. Bert Lum, Dr. Paul Scheuer, the Bishop Museum and the Government of French Polynesia.

Some of the material in this article was originally published in "Medical Manual for the Pacific Islands" U. of Hawaii, 1982, under a grant from The DeWitt Wallace Fund, Reader's Digest.


University departments and companies with interest in natural products are: The University of Arizona; Leslie Gunatilaka, Ph.D., 250 E. Valencia Rd., Tucson, AZ. 85706-6800. University of Rhode Island, College of Pharmacy, University of Miami, University of Hawaii, Dept. of Biochemistry, (Richard Moore, Ph.D.) Shaman Pharmaceuticals Inc., South Francisco, Cal., 94080-4812, Natural Products Branch, NCI, Bethesda, Md., Merck Sharp and Dohme, Eastman Pharmaceuticals, Smith, Kline and Beecham, and Glaxo.

References

- Alternative Medicine Issue, *JAMA*, 11 Nov, Vol. 280, No. 18, 1998.
- Kamakau SM. Ka po'e kahiko. Bernice P. Bishop Museum Spec. Pub. 51, 1954.
- Formander A. An account of the Polynesian Race. Charles E. Tuttle Co., Pub., Rutland, Vermont, and Tokyo. 1969.
- Pukui MK, HaertigEW, LeeCA. Naha i Ke Kumu, vol 1 and 2, Honolulu, HI, Pub. Hui Hanai, 1972.
- KleinbergML, WankeLA. New Approaches and Technologies in Drug Design and Discovery. *Am J Health-Syst Pharm.* Vol 52, June 15, 1995, pp 1323-1336.
- MaloneMH. The Pharmacological Evaluation of Natural Products- general and Specific Approaches to Screening Ethnopharmaceuticals. *J. Ethnopharmacol*, 1983 Aug; 8 (2): 127-147.
- The Economist, May 30th, 1998. Biotech's Secret Garden. pp 75-77.
- WallaceRW. Drugs From The Sea: Harvesting the Results of Aeons of Chemical Evolution. *Mol Med Today* 1997 Jul; 3 (7): 291-295.
- EisenbergDM. Unconventional Medicine in the United States. *NEJM* Vol. 328, Issue # 4 pg.246-52. 1993
- KingSR, TempestaMS. From Shaman to Human Clinical Trials: the Role of Industry in Ethnobotany, Conservation and Community Reciprocity. *Ciba Found Symp*; 185:197-206, discussion 206-13.
- CoxPA, BalickMJ. The Ethnobotanical Approach to Drug Discovery. *Scientific American* June 1994.
- CoxPA. The Ethnobotanical Approach to Drug Discovery: Strengths and Limitations. *Ciba Found Symp*; 185: 25-36; discussion 36-41. 1994.
- PlotkinM. In Search of Plants That Heal. *Altern Ther Health Med*, Mar; 2(2): 66-75. 1996.
- GarrisonFH. History of Medicine, 4th Ed. W. B. Saunders Co. Philadelphia, Pa. and London, UK. 1929.
- The Rauwolfia Story, Pub. Ciba Pharmaceutical Products, Inc., 1954.
- CoxPA, Ethnopharmacology and the Search for New Drugs. *Ciba Found Symp*; 154:40-7, discussion 47-55.
- LewisJGE. The Biology of the Centipede. Cambridge U. Press. 1981
- Ref. 1.
- Ref. 5.
- DyerKA. Curiosities of Contraception, A Historical Perspective. *JAMA*, 1990 264:21, 2818-19.
- TabrahFL, KashiwagiM, NortonTR. Antitumor Activity in Mice of Tentacles of Two Tropical Sea Annelids. *Science*, 9 Oct 197, Vol 170, 181-83.
- SteinmetzEF, Piper Methysticum (Kava), Amsterdam, Netherlands, 1960.

Get Info
Move To Trash
Restart
Shut Down
Help

To find out what you can do visit us at www.surfrider.org/hawaii or call 531-SURF.
And if you see trash on the beach, please pick it up.

 SURFRIDER
FOUNDATION
HAWAII